Volume 169 No. 11

Oil, Paint and Drug Reporter

The Chemical Market Authority Since 1871

March 12 1956

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turn to page 28

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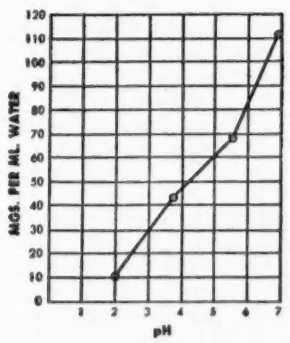

SOLUBILITY of Roche riboflavin-5′-phosphate sodium in water at different pH levels; room temperature.

These data show that solubility of Roche B_2 phosphate sodium depends on hydrogen ion concentration in water. It is useful to note that the solubility of riboflavin U.S.P. (approximately 0.12 mg. per ml.) inserted on this graph would fall just above the base line.

SPECIFICATIONS Tests show that riboflavin-5′-phosphate sodium (M.W. 514.4) has the full theoretical activity on the molecular basis of riboflavin (M.W. 376.36). Theoretically one gram of the phosphate is equivalent to 0.73 grams of riboflavin. The Roche product contains small amounts of moisture, disodium salt, diphosphate ester and unesterified riboflavin. It has a riboflavin activity of 70-73% by weight.

USES The new riboflavin-5′-phosphate sodium, probably the most important riboflavin development since Roche introduced the vitamin commercially in 1941, is specially designed for use in manufacturing:

- vitamin parenteral solutions
- water-dispersible multivitamin drops and gelatin capsules
- tablets (in which rapidly-soluble riboflavin is desirable)

better taste

Roche riboflavin-5′-phosphate sodium does not have the intensely bitter taste of riboflavin itself. It is more palatable in high concentrations. This different taste characteristic is of definite advantage in oral preparations.

SOLUBILITY—TASTE DEMONSTRATION You can prove to yourself, easily and quickly, the solubility-taste advantages of Roche riboflavin-5′-phosphate sodium with the Roche demonstration kit. Ask your Roche representative to show it to you. Or we'll be glad to send one, without charge, at your request.

BIOLOGICAL AVAILABILITY Roche riboflavin-5′-phosphate sodium has immediate biological activity because it is identical with the natural flavin mononucleotide occurring in the "yellow" respiratory tissue enzyme system.

COST COMPARISON Even though the cost of Roche B_2-5′ is somewhat higher than regular riboflavin, its use can result in actual savings. You eliminate expensive solubilizers and unnecessarily large amounts of niacinamide. You reduce or eliminate costly complaints and returns. You are able to make manufacturing economies.

STABILITY

Roche riboflavin-5′-phosphate sodium (riboflavin-5′-phosphate ester monosodium salt dihydrate) in general has the same stability properties as riboflavin.

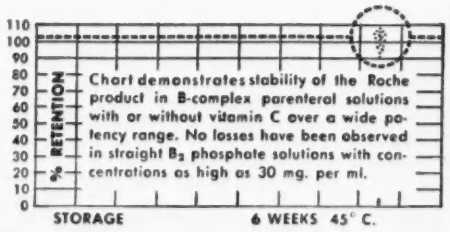

Chart demonstrates stability of the Roche product in B-complex parenteral solutions with or without vitamin C over a wide potency range. No losses have been observed in straight B_2 phosphate solutions with concentrations as high as 30 mg. per ml.

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MAR 12 1956

Oil, Paint and Drug Reporter

Vol. 169 No. 11 30 Church St., New York 7, N. Y. March 12, 1956

Oil Industry Split on OTC

The oil industry is split down the middle on the proposal that the United States become a member of the Organization for Trade Cooperation, judging by last week's testimony before the house ways and means committee.

While importers favor the step as in keeping with the policy of lowering trade barriers, domestic producers vigorously object to any sort of control of domestic policies by an international organization.

The question of US participation in the OTC has been presented to congress by President Eisenhower with a strongly worded endorsement of the proposition as a showing of leadership to the world that this country is firm in its policy of easing trade barriers.

OTC is the administrative agency set up by thirty-five foreign governments to handle problems arising under the General Agreement on Tariffs and Trade.

Typical of the opposition to the administration's bill (HR 5550) is a statement presented by L. Dan Jones, assistant general counsel for the Independent Petroleum Association of America.

IPAA contends that the oil import problem is a matter vital to defense and that the United States should remain free to take whatever action may be necessary to solve it and, further, that agreements under GATT outlawing quotas are in conflict with the national security amendment to the trade agreements act.

Among those favoring the bill is Standard Oil Company (New Jersey), New York, whose treasurer, Emilio G. Collado, regards membership in OTC as an important step in the foreign economic program of the United States.

Automobile Output Cutback Causing Slight Dip in Demand For Chemicals: Producers

Is the cutback in automobile production being felt yet by the chemical industry? If so, how much is it being hurt? These questions OPD put to chemical producers last week, and this is their composite report.

The sharp decline in passenger cars output—off nearly 17 percent so far this year—is having only a slight impact on the chemical industry. Producers polled by OPD's market reporting staff last week indicate a slight dent in demand for chemicals that are normally channeled to auto makers.

In general, they regard this falling-off in business as only negligible. And, they add, nowhere can the automobile situation be definitely labeled as the cause. For, it is pointed out, there has been a general leveling off in business since the peak levels of 1955's fourth quarter, and demand from car manufacturers is only one of several factors producing this flattening out.

Phthalic Anhydride Situation

Producers of phthalic anhydride note a slight easing in demand, presumably due to the automobile cutback. However, despite this, they stress, it is still moving in fairly heavy volume. Phthalic finds its way into passenger cars via alkyd resins in enamels and plasticizers in lacquers.

On ester and ketone solvents, reports are mixed. Some suppliers see a slight easing, while others maintain there is no perceptible change in demand. One company notes a small decline in butyl acetate business.

Another, telling of a mild drop-off in demand for most of its lacquer solvents line, sees the appliance and furniture industries taking up the slack left by the auto makers.

This firm says that a 20 percent slash in automobile output works out to about a 3 to 5 percent reduction in its overall lacquer solvent business.

Demand for styrene monomer and butadiene continues strong. The loss in business due to the cutback in tire production has been more than made up by inquiries from foreign buyers and from consumers of the rubber materials for non-tire uses.

Rubber accelerators — such things as diphenylguanidine, di-o-tolylguanidine,

—Continued on page 67

HILTON-DAVIS HEAD: Harold L. Hansen, elected vice-president of Sterling Drug, Inc., in charge of its Hilton-Davis Chemical Company Division, Cincinnati, Ohio, succeeding the late James F. Thompson.

Pfizer Licensed by Ferment-Acid In Settlement of Citric Acid Dispute

The $5 million citric acid patent suit brought against Chas. Pfizer & Co., Brooklyn, N. Y., by Ferment-Acid Corporation, New York, has been quietly settled out of court, OPD has learned. The Pfizer annual report for 1955, slated for publication this week, is expected to acknowledge officially termination of the action after eighteen months of litigation. Under terms of the accord, Pfizer has agreed to pay $220.000 for use of the Ferment-Acid patent during its remaining five years of life.

ESCAMBIA VICE-PRESIDENT: Robert U. Haslanger, made vice-president and general manager of Escambia Bay Chemical Corporation, Cambridge, Mass.

The case was cleared from the court docket late last month in a consent judgment issued by Judge Robert Anderson of the US District Court of Connecticut. In a statement to OPD confirming the agreement, Pfizer pointed out that it was reached "without liability on the part of either party to the other."

Mutual Liability Release

"The two companies," Pfizer noted, "agreed to release each other from any liability arising out of a contract entered into in 1944, which pertained to a process for the production of citric acid by submerged fermentation."

In a complaint it filed in 1954, Ferment-Acid charged Pfizer with wrongfully using a "deep fermentation" process for citric acid, which was originally developed by Dr. Joseph Szucs.

Ferment-Acid also contended that the Brooklyn firm had improperly used confidential data disclosed by Dr. Szucs to the company during the period that Pfizer investigated the Szucs process under a so-called "look-see" contract.

In outlining details of the settlement, Pfizer said it has signed a licensing agreement for the "remaining life" of the Ferment-Acid citric acid patent "involving payment of an aggregate of $220,000 over a period of years."

The Szucs patent for "deep fermentation" of citric acid (No. 2353771) was issued in July, 1944. Under the present patent law, it will expire in July of 1961.

Ferment-Acid still has a similar citric patent infringement suit pending in US District Court, Southern District of New York, against Miles Laboratories, Inc., Elkart, Ind. The Miles action, also filed in 1944, is for $1 million in damages.

Polyethylene Unit Projected by Koppers

Koppers Company, Pittsburgh, Pa., will build a multi-million dollar, 30,000,000 pound annual capacity, low-pressure lineartype polyethylene plant in Woodbridge Township, Middlesex County, N. J.

Construction will begin immediately with production scheduled for the first quarter of 1957.

The new plant will be operated by the Koppers chemical division. George M. Walker, vice-president and general manager of that division, said that "Through the erection of this plant Koppers will maintain its leadership in the industry by being the first to offer large-scale commercial quantities of this recently-developed plastics material which has wide applications in industrial and consumer products."

Developed by Koppers from basic European patents, the new material will be

—Continued on page 46

Penick Forms French Firm

S. B. Penick & Co., New York, has formed S. B. Penick & Co. (S.A.R.L.), with headquarters in Chatou, France. The managing director is Henri Beaudichon, Penick's representative in France since 1946. Penick has facilities in London through association with C. F. Gerhardt, Ltd.

Thorium Project Under Way

Metal Hydrides, Inc., Beverly, Mass., has completed negotiations for underwriting a research program to develop production techniques for thorium metal powder. The program will be carried out in part by Battelle Memorial Institute, Columbus, Ohio.

Rail Increases Authorized For All But Farm Items

The Interstate Commerce Commission last week authorized the railroads to raise their freight rates 6 percent on all but certain farm commodities. The increase in the latter was limited to 5 percent.

The commission's order was on a request by railroads to raise their rates across-the-board by 7 percent to meet rising costs of labor and materials. Motor truck operators filed petitions for similar increases in their charges.

In its order on the rail increase, the ICC ruled that line-haul rates on coal and coal in carload lots may be increased by 6 percent to a maximum of 15 cents a net ton. Carload rates on grain, and grain by-products, livestock and fresh meat, and packinghouse products were limited to a 5 percent increase.

Other products were limited to an increase of 6 percent above previous rates.

Foote Will Absorb Manganese Producer

Foote Mineral Company, Philadelphia, plans to absorb Electro Manganese Corporation, Knoxville, Tenn., and operate it as a division. The boards of the two firms have agreed to the issue of 169.718 shares of Foote common stock in exchange for the net assets and business of the Knoxville electrolytic manganese metal producer.

The stock deal, which has been under negotiation for several months, is equivalent to a share-for-share exchange. Final approval of the transaction is contingent upon approval of Electro Manganese stockholders at a special meeting today, and consent to assignment of a contract which Electro has with General Services Administration.

Foote markets over fifty products to the

—Continued on page 67

Warren Purchases Site For Petrochemical Plant

Warren Petroleum Corporation has bought a 300-acre site in Houston, Tex., for a multi-million-dollar petrochemical plant.

The company is reported to have paid about $275,000 for the land. The tract is on the San Jacinto River and the Wallisville road, immediately south of an adjoining site of the $25 million chemical plant being constructed for Texas Butadiene & Chemical Corporation.

Gold-Colored Aluminum Is Developed by Kaiser

A revolutionary new method of producing non-fading gold-colored aluminum in a variety of shades and tones has been developed by Kaiser Aluminum & Chemical Corporation, Oakland, Calif.

The source of the color is built into the metal itself. The color is brought out—without the use of dyes or other coloring materials—by anodizing under readily controlled conditions. The gold color may be varied from pale straw to deeper gold and gold-bronze tones, and the finish may be either bright or satin.

The new process, protected by patent rights of the corporation, imparts a sunfast gold color and provides excellent color matching by eliminating the uncertainties that unavoidably occur with dyes or other coloring agents which previously had to be added to the anodic coating, Kaiser said. By eliminating the dyeing step, the finishing process is simplified, thus resulting in substantial time saving.

Because of the permanence of its color, the new Kaiser gold aluminum is especially suited for a wide range of exterior architectural applications, automotive trim, furniture and home appliances, the company said.

Development is also under way of an alloy particularly suitable for decorative ware and other applications, where an exceptionally bright, rich gold finish is desired.

The gold aluminum has been produced experimentally at the corporation's Trentwood, Wash., rolling mill, and will soon be commercially available in sheet form. Development work is now in progress aimed at adapting the gold alloy to products in other forms, such as extrusions.

Salk Vaccine Output Rising, But Shortage Is Seen Continuing

An increase in production of the Salk polio vaccine is being undertaken by several of the producing companies in the immediate future, but a shortage of the drug for all who need it will persist for many months. This outlook on supplies of the important vaccine as the start of the 1956 polio season neared for some sections of the country was given by Secretary Marion B. Folsom of the Department of Health, Education and Welfare, at the conclusion of a conference with the presidents of each of the five manufacturers last week.

WINS SALES PROMOTION: J. E. Shand, named assistant to the chemical sales manager of Barrett Division, Allied Chemical & Dye Corporation, New York.

Attending the meeting were Eugene Beesley of Eli Lilly & Co.; Harry Loynd of Parke, Davis & Co.; Kenneth F. Valentine of Pitman-Moore Company; John Bill of Sharp & Dohme, Inc., a division of Merck & Co.; and Harry S. Howard of Wyeth Laboratories.

Participating for HEW Department

Participating for the department were Dr. Lowell T. Coggeshall, special assistant to the secretary on health and medical affairs, Surgeon General Leonard A. Sheele, and Dr. James A. Shannon, director of the National Institute of Health.

In a statement on the conference, Secretary Folsom said:—

"Both the manufacturers and the department are concerned over the need to provide the largest possible supply of safe and effective poliomylitis vaccine.

"This vaccine is one of the most complex to produce of any in the nation's experience. The manufacturers and department officials have reviewed the current outlook and have discussed how they may be mutually helpful in improving the supply.

"Several of the manufacturers indicated they are taking steps, involving additional personnel and equipment, in an effort to increase their output.

"The manufacturers are hopeful that within the next few months, production and release of the vaccine will be increased over the rate of the past several months.

"Even with increased production, however, it is likely to be many months before enough vaccine will be available to provide the recommended three injec-

—*Continued on page 58*

FDA Gets Biggest Enforcement Budget

The Food and Drug Administration has $6,779,000 to use for enforcement purposes during fiscal 1957. This is the largest enforcement fund ever granted to the agency in its history. It is $995,000 over the amount appropriated for fiscal 1956 and will be used almost entirely to step up enforcement work in line with recommendations made a year ago by the Citizens Advisory Committee.

According to Commissioner George P. Larrick, in testimony before the appropriations committee urging the 15 percent increase in funds, it is intended to add about 134 more persons to the payroll, all

—*Continued on page 66*

Anhydrous Ammonia Plant Projected at Lake Charles

Plans for construction of an estimated $12,500,000 petrochemical plant at Lake Charles, La., to produce anhydrous ammonia for use primarily as a fertilizer were announced Saturday by F. M. Simpson, vice-president and general manager of Petroleum Chemicals, Inc., which is owned jointly by Continental Oil Company and Cities Service Company.

The plant will produce 100,000 tons of ammonia annually. Construction will start within the next few weeks and is scheduled for completion in the fall of 1957.

Shawinigan Elects Jane As Successor to Bartram

Dr. R. S. Jane was elected president of Shawinigan Chemicals, Ltd., and Victor G. Bartram, who has retired as president, was named chairman of the board, at a recent meeting of the board of directors in Montreal. Dr. Jane was previously executive vice-president.

Also announced was Mr. Bartram's retirement as president of Canadian Resins & Chemicals, Ltd.; B. A. Shawinigan, Ltd., and St. Maurice Chemicals, Ltd., all companies associated with Shawinigan. He remains a director of the three companies.

Mr. Bartram is being succeeded by R. J. Southwell as president of Canadian Resins & Chemicals and by Dr. Jane as president of B. A. Shawinigan and St. Maurice Chemicals.

The Week's Price Changes

Celery Seed, Copra, Rock and Table Salts Are Higher. Argentine Casein, Monosodium Glutamate, Cumin Oil Lower.

Prices Advanced

Celery seed, French, 1c. per lb. (p. 54)
Indian, ½c. per lb.
Copra, $2.50 per ton (p. 62)
Oil, citronella, Java-type, 5c. per lb. (p. 54)
Coconut, crude, ⅜c. per lb. (p. 62)
Corn, crude, ¼c. per lb. (p. 62)
refd., ¼c. per lb.
Cottonseed, crude, ⅜c. per lb. (p. 62)
refd., ⅜c. per lb.
Rapeseed, ¼c. per lb. (p. 62)
Soybean, crude, ½c. per lb. (p. 62)
refd., ½c. per lb.
Pimento, Mexican, 1c. per lb. (p. 54)
Salt, rock, 2c. per cwt. (p. 32)
table, 2c. per cwt.

Prices Reduced

Casein, Argentine, ½c. per lb. (p. 56)
Clove, Madagascar, 1c. per lb. (p. 54)
Cocoa butter, 1c. per lb. (p. 62)
Coriander seed, Moroccan, ½c. per lb. (p. 54)
Cottonseed meal, $1 per ton (p. 62)
Ginger, Jamaica, No. 2, 1c. per lb. (p. 54)
No. 3, 1c. per lb.
Nigerian, split, 1c. per lb.
Greases, ¼c. per lb. (p. 62)
Linseed meal, $1.50 per ton (p. 62)
Mercury, $2 per flk. (p. 32)
Oil, cumin, 25c. per lb. (p. 54)
Dillweed, dom., 40c. per lb. (p. 54)
Tung, ¼c. per lb. (p. 62)
Sodium glutamate, mono, 4c. per lb. (p. 49)
Soybean meal, $1.50 per ton (p. 62)
Tallow, ½c. per lb. (p. 62)

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

Mar. 9, 1956	Mar. 2, 1956	Mar. 11, 1955
106.97	107.07	107.45

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In This Issue

Association News

ACS New York Unit Readies Program.... 7
Captive Operation Topic at CCDA..... 5
Creative Ads Essential: Bristol..... 7
Drug Group Set for Technical Parley.... 7
HIF Is Studying Old Age..... 4
SOCMA to Hear Automation Speech..... 33
Western Chemical Group to Meet..... 7

Government News

Atomic Energy Patent Rules Unfair..... 5
FDA Policing Budget at Peak..... 4
FDA Short of Men..... 5
Rail Increases Authorized..... 3

Industry News

Allied Coast Offices Unite..... 47
American-Marietta Absorbs Presstite.... 34
Ammonia Facility Slated for Lake Charles. 4
Anhydrous Ammonia Plant Planned... 4
Automobile Production Cut..... 3
Diamond Doubles Perchlorethylene..... 5
Dodge & Olcott Issues Publication..... 51
Dow Opens Research Lab..... 5
Drug Industry Wage Talks Due..... 4
Fatty Acid Output: Jan..... 62
Foote to Absorb Manganese Producer.... 3
Grace Expands Chemical Organization... 5
Hooker's 'Hetron' Sales Shifted..... 37
Kaiser Develops Gold-Aluminum..... 3
Koppers Plans Polyethylene Plant..... 3
Oil Industry Split on OTC..... 3
Pacific Coast Borax Appoints Burke.... 37
Pfizer Suit Settled..... 3
Polyethylene Unit Slated..... 7
Salk Vaccine Output Rising..... 4
Shale Oil Competition Seen..... 4
Thorium Project Under Way..... 3
Tide Water to Spend $195 Million..... 7
Vitro Obtains Uranium Firm..... 7
Warren Purchases Site..... 3
West End, Stauffer Study Merger..... 4

International News

Cutter Forms Argentina Branch..... 5
Oil Industry Split on OTC..... 3
Penick Forms French Firm..... 3
Rayonier Builds Canada Unit..... 5
Soybean Output at Record High..... 7
Tallow, Grease Exports Hit Record..... 7

Personnel News

Armour Chemical Division Fills Posts.... 35
Barrett Names Shand..... 4
Blackwood to Head Grace Division..... 5
Cabot Names King..... 7
Colgate Advances Two..... 42
Corn Products Elects Brady..... 34
Cyanamid Elevates Russell..... 7
Escambia Bay Elects Haslanger..... 3
Gilbert Named to Head Grace Division.. 5
Grace Names Dewey to Head Division... 5
Hilton-Davis Appoints Hansen..... 3
Miller to Head Grace Polymer Unit..... 5
Pfaudler Appoints Holcombe..... 33
Pfizer Settlement Reached..... 3
Research Corp. Picks Yates..... 47
Schering Picks Ad Manager..... 51
Shawingan Elects..... 4
Stein-Davies Elects Two..... 46
Zirconium Corp. Picks Coyle..... 4

Market Reports

Acids 32
Agricultural Chemicals..... 38
Aliphatic Organics..... 40
Aromatic Chemicals..... 54
Botanical Drugs, Gums..... 49
Coal Chemicals..... 44
Coating Materials..... 56
Drugs 49
Essential Oils..... 54
Fats and Greases..... 62
Fertilizer Materials..... 38
Fine Chemicals..... 49
Heavy Chemicals..... 32
Industrial Organic Chemicals..... 40
Lacquer Materials..... 56
Leather Chemicals..... 43
Naval Stores..... 56
Oil Cake and Meal..... 62
Oils 62
Paint Materials..... 56
Pesticides 38
Petrochemicals 40
Petroleum Derivatives..... 39
Protective Coatings Materials..... 56
Spices 54
Textile Chemicals..... 43
Waxes 62

General Features

Advertisers Index..... 67
Association Meeting Dates..... 7
Bids Wanted..... 47
Classified Advertisements..... 66
Consulting Chemists and Engineers..... 47
Coal Chemical Output..... 44
Crude Oil Stocks..... 39
Current Market Quotations..... 9
Editorials 30
Imports 52
Imports Detained..... 54
Obituaries 42
OPD Price Index..... 4
Washington Talks It Over..... 30

Drug Industry Wage Talks Due

A labor-management conference is to be called later this month by the Department of Labor on raising the minimum wage for the drug and medicine industry under the Walsh-Healey public contracts act. At the present time, a minimum of 93 cents an hour is fixed for this industry under the law, which, however, is now in conflict with the national minimum wage for all industry under the fair labor standards act which went up from 75 cents an hour to $1 an hour on March 1.

It is probable that a minimum wage determination for the drug and medicine industry above the $1 minimum fixed under the fair labor standards act will be proposed at the conference by the government. How much more than $1 will be proposed, however, has not been indicated.

The minimum for certain other branches of the chemical and allied industry will be raised to the $1 level under the Walsh-Healey act under orders shortly to be issued by the department.

Shale Oil Seen More Competitive With Crude

Because of the higher and increasing costs of discovery of new sources of crude petroleum, shale oil is becoming more attractive economically. That's the view of Reese H. Taylor, president of Union Oil Company of California, Los Angeles.

In his 1955 annual report, mailed to stockholders last week, Mr. Taylor called attention to the fact that Union Oil's $5 million shale research program is due for completion next year. At that time, he said, the company will learn whether or not its shale oil deposits in Colorado "will be competitive with crude oil."

West End and Stauffer Are Studying Merger

West End Chemical Company, Oakland, Calif., and Stauffer Chemical Company, New York, have announced that representatives of their boards of directors are giving active consideration to a proposal for merger of West End with Stauffer.

Under the terms of the proposal it is contemplated that West End will continue to operate under its present management as an autonomous division of Stauffer.

COMPANY PRESIDENT: Norton V. Coyle, elected president of Zirconium Corporation of America, Solon, Ohio.

HIF Is Studying Problems of Old Age

Health Information Foundation, in cooperation with the National Opinion Research Center of the University of Chicago, is beginning a comprehensive study of people over sixty-five in the United States. Odin W. Anderson, Ph.D., the foundation's research director, said the study will investigate the problems of the aging through personal interviews with those in the upper ages themselves and also with relatives responsible for them.

The study will be conducted under a foundation grant by the National Opinion Research Center to gather data on problems such as retirement, required income,

—*Continued on page 46*

Dow Opens Research Lab

Dow Chemical Company has opened a new $1,100,000 laboratory building for research in biochemistry at the company headquarters in Midland, Mich.

The biochemical research department is already installed in the new building with this three-fold assignment:—

- Safeguarding the health of the public and industrial workers through exhaustive investigation of proposed chemical products and processes.
- Specific research to find and develop new and useful products.
- Basic research in the chemistry of living things.

The air-conditioned, one-story building houses twenty-six laboratories. It is almost square and covers roughly the area of a football field. Sixty-four men and women are on the staff. There is room for about thirty more.

Housed in eight animal rooms are several thousand rabbits, rats, mice, guinea pigs and monkeys, including breeding colonies of rabbits, rats and guinea pigs.

The architect was Alden B. Dow, a son of Dr. Herbert H. Dow, the company's founder.

In spite of its size, the building has but one window—a picture window in the lobby. "For scientific work, better control of temperature, light and ventilation could be obtained by eliminating window construction," explained Dr. Don D. Irish, biochemical research director.

The new design also permits more compact construction.

Banks of fluorescent tubes provide uniform lighting for research. Air conditioning which heats the air in winter and cools it in summer provides stable temperatures for delicate experiments and for the hundreds of laboratory animals.

Dow's biochemical research department, an early laboratory of this kind within the chemical industry, was founded in 1933 with Dr. Irish as its first member.

Atomic Energy Patent Rules Unsound, Unfair, NAM Man Says

The patent provisions of the 1954 atomic energy act are unsound and unfair both from the standpoint of advancing this industry in the United States and equalizing the rights of American and foreign patent owners. This was the opinion expressed last week by William A. Steiger, vice-chairman of the committee on patents of the National Association of Manufacturers, to the joint congressional committee on atomic energy.

The committee is currently holding hearings on peaceful uses of atomic energy based on a report of a panel of industry experts filed earlier this year—the so-called McKinney report.

The panel concluded, as regards the patent provisions of the 1954 act, that a general review of these provisions be put aside until later when the compulsory licensing requirements becomes effective on September 1, 1959.

Mr. Steiger complained that section 152 of the 1954 law, the patent section, is so broad that it actually vests in the AEC any invention or discovery that any private inventor might make or conceive as long as there is some "arrangement or

—*Continued on page 46*

Borden Plans Methyl Acetate Output Rise

A 50 percent increase in production capacity for technical grade methyl acetate has been announced by the chemical division of Borden Company. Borden lays claim to being the largest commercial producer of methyl acetate in the United States.

The lowest priced ester currently being produced in commercial quantities, Borden's methyl acetate is sold under the trade name, "Methac." It is used as a chemical intermediate in the manufacture of dyes, perfumes, flavorings, biochemicals, surface coating dopes and other general organic syntheses.

FDA's Inspector Due Every 9 Years

The Food and Drug Administration is so short of inspectors that it can check establishments only once in nine years, according to George P. Larrick, Commissioner of Foods and Drugs.

Speaking at a dinner sponsored by Abbott Laboratories, North Chicago, Ill., to commemorate the fiftieth anniversary of the food and drugs laws, Mr. Larrick told an audience of physicians, pharmacists and public officials that "FDA has the job of checking 96,000 food, drug, beverage and cosmetic establishments who are respon-

—*Continued on page 46*

Cutter Laboratories Forms New Company in Argentina

Cutter Laboratories, Berkeley, Calif., has announced the authorization, by the Argentine government, for the formation of Cutter-Quimica Argentina. This corporation will be jointly owned by Cutter and Serum-Quimica Argentina, S.R.L. of Buenos Aires.

Cutter-Quimica Argentina will be Cutter's first investment in the manufacture of any of its products outside of the United States. Originally, the new company will produce only intravenous solutions and disposable infusion equipment.

Captive Operation Decision Should Consider Money Saved, Available, CCDA Is Told

A chemical company contemplating manufacture of its own raw materials cannot base its decision only on savings to be effected. It must also decide whether or not the money could be more profitably used in another area of operations, Theodore S. Hodgins, vice-president in charge of research and development for Reichhold Chemicals, Inc., told the annual meeting of the Commercial Chemical Development Association last week.

The meeting, held in New York, marked the election of Dr. Frank E. Dolian, manager of the market development department of Commercial Solvents Corporation, as vice-president and president-elect.

F. S. Swackhammer, manager of the resins and plastics department of Shell Chemical Corporation, is the new CCDA president. He succeeds Dr. R. L. Bateman, director of product development for Carbide & Carbon Chemicals Company, a division of Union Carbide & Carbon Corporation.

Dr. Frank E. Dolian

Optimum Size Needed for Operation

According to Mr. Hodgins, basic chemical manufacture must always be on a scale large enough to be economical and yet not so huge as to necessitate the creation of new marketing facilities and staff to dispose of any surplus not used by the company.

Two other criteria in determining the advisability of expansion in raw material manufacture are, according to Mr. Hodgins, transportation logistics and company policy. In the former, he refers to the locations of a company's plants in geographical relation to the contemplated raw material plant.

Freight costs are an important factor, he feels. In connection with policy he explains that manufacture of some raw materials will lead, inevitably, to production of an end product. A chemical concern must decide, in this connection,

—*Continued on page 58*

Rayonier Silvichemical Unit In Canada Nears Completion

The first Canadian silvichemical plant of Rayonier, Inc., located at Marpole, British Columbia, is nearing completion, according to William E. Breitenback, executive vice-president of Alaska Pine & Cellulose, Ltd., Canadian subsidiary of Rayonier.

Last week the first section of a 6,000-foot network of pipelines was installed. Target date for completion of the $1 million facility for producing "Rayflo," an oil well drilling mud dispersant from western hemlock, is July 1.

Diamond to Double Perchlorethylene Unit

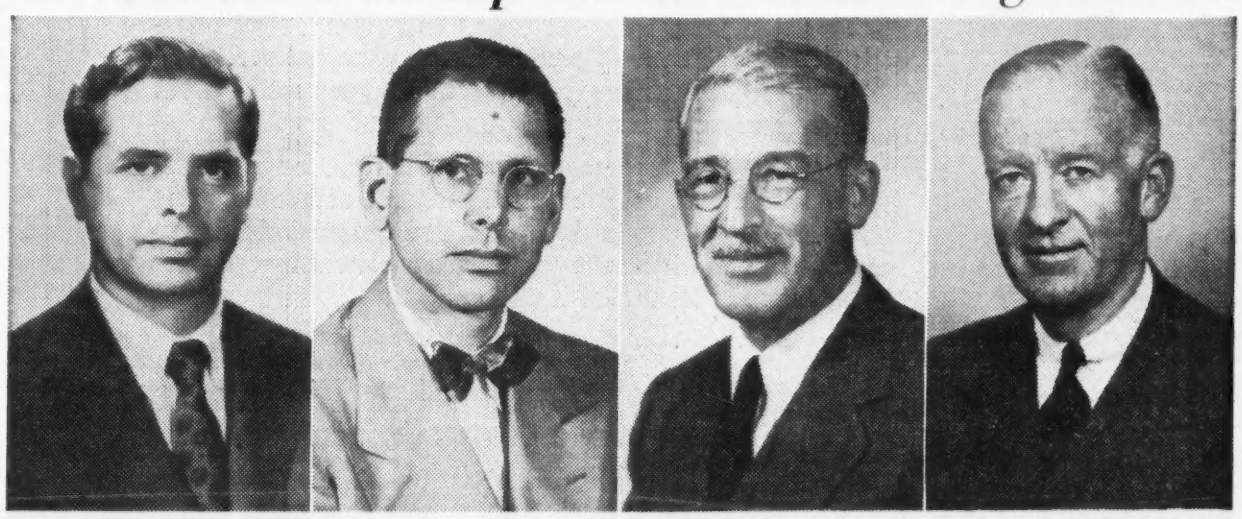
Diamond Alkali Company plans to double present capacity for the production of perchlorethylene at its Deer Park plant in Houston, Tex. It is anticipated that this expansion will be completed by January, 1957, since the design and engineering phases are already nearly finished. Construction will start in the immediate future.

This multi-million dollar project, to be located in a new area of the plant, will be laid out to provide for future expansion of the chorinated products division's activities, both by increasing the capacity of the present products and the addition of new units for new products as they are developed.

In addition to the necessary equipment, supporting units and connecting field lines

—*Continued on page 36*

W. R. Grace & Co. Expands Its Chemical Organization



Presidents of new W. R. Grace & Co. divisions are, from left, George W. Blackwood of Dewey & Almy Chemical Company Division, Dr. Bradley Dewey, jr., of "Cryovac" Company Division, Henry L. Gilbert of Dewey & Almy Overseas Company Division and T. T. Miller of polymer chemicals divisions, organized by the parent firm last week.

W. R. Grace & Co., New York, has established four new divisions in a realignment of its chemical operations, according to Hugh S. Ferguson, executive vice-president of the company in charge of its chemical group.

The former Dewey & Almy Chemical Company, of which Mr. Ferguson was president prior to its merger with W. R. Grace & Co. and until his reelection to the Grace post, is now divided into three divisions of the parent company.

The Dewey & Almy operations under the historic name will be headed by George W. Blackwood as president and William L. Taggart, jr., as executive vice-president.

The "Cryovac" Company Division will have Dr. Bradley Dewey, jr., as its president. Dewey & Almy Overseas Company Division, which will be responsible for all exports from this country as well as the manufacture and sales of all products overseas, will have as its president Henry L. Gilbert.

A polymer chemicals division has also been set up under T. T. Miller as president. Elwyn E. Winne will be vice-president of this unit. Ground breaking ceremonies were held last week in Baton Rouge, La., for construction of a polyethylene plant for this division.

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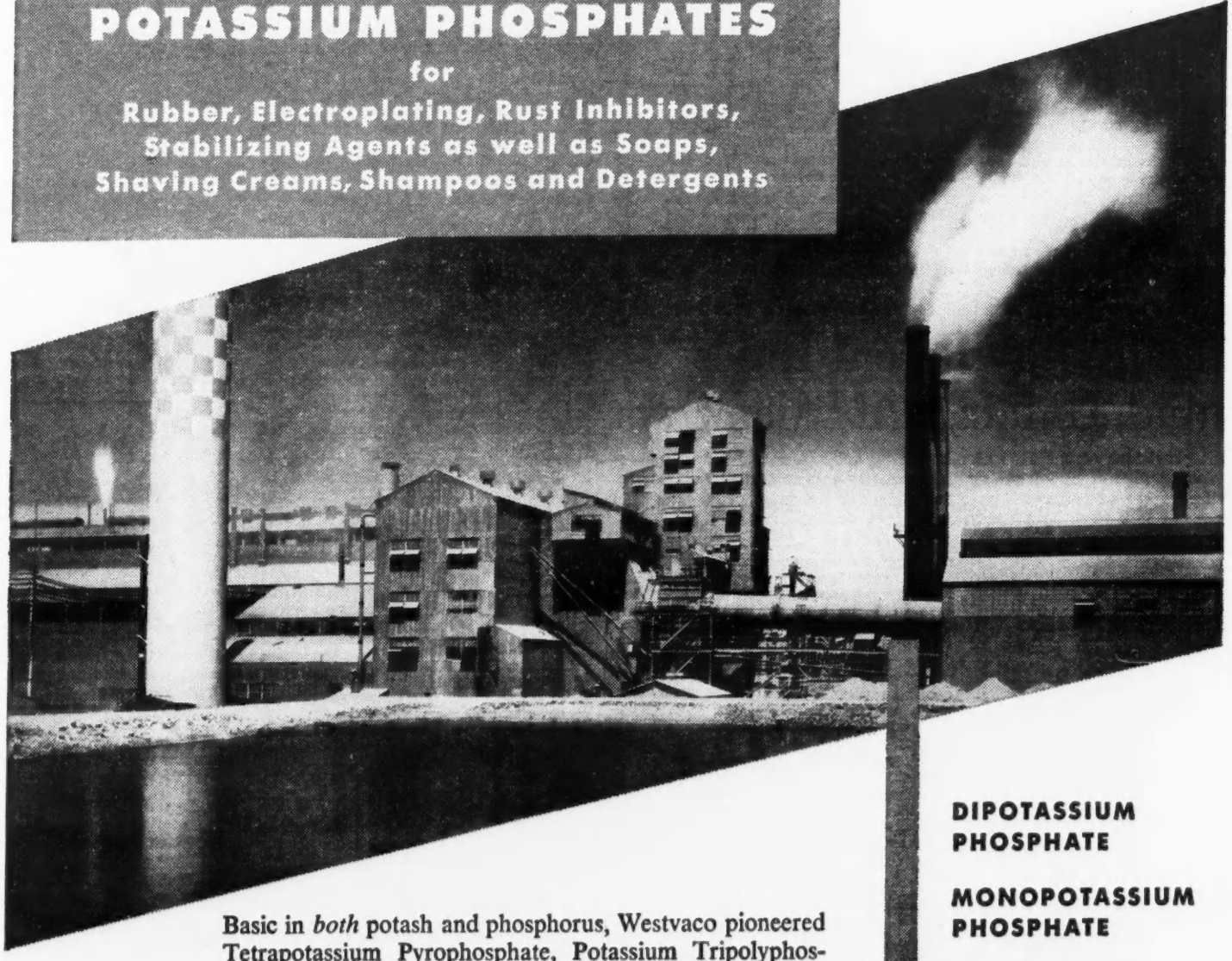
for

Rubber, Electroplating, Rust Inhibitors,
Stabilizing Agents as well as Soaps,
Shaving Creams, Shampoos and Detergents



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MONOPOTASSIUM PHOSPHATE

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Association Meetings

Combined Pharmaceutical Contact Committee of the American Drug Manufacturers Association and the American Pharmaceutical Manufacturers Association, Washington hotel, Washington, D. C., March 4.
National Agricultural Chemicals Association, spring meeting, Hollywood Beach hotel, Hollywood, Fla., March 14-16.
Oil Trades Association of New York, annual meeting, Waldorf-Astoria hotel, New York, March 13.
Salesmen's Association of the American Chemical Industry, luncheon, Waldorf-Astoria hotel, New York, March 15.
Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, March 13.
Western Chemical Market Research Group, March meeting, Marine's Memorial Club, San Francisco, March 15.

American Chemical Society, national meeting, Dallas, Tex., April 13; Minneapolis, Minn., September 11.
American Drug Manufacturers Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., April 29-May 3.
American Institute of Chemists, annual meeting, Statler hotel, Boston, Mass., May 9-11.
American Management Association, packaging conference and exposition, Convention Hall, Atlantic City, N. J., April 9-12.
American Pharmaceutical Manufacturers Association; annual meeting, Boca Raton Club, Boca Raton, Fla., April 9-11.
American Society of Perfumers, symposium, Essex House, New York, March 21.
American Zinc Institute, annual meeting, Statler hotel, St. Louis, Mo., April 23-24.
Association of Consulting Chemists and Chemical Engineers, banquet and symposium, Belmont Plaza hotel, New York, April 25.
Chemical Bureau Alumni Association, spring get-together, Lexington hotel, New York, April 26.
Chemical Market Research Association, annual meeting, Biltmore hotel, New York, May 14-15.
Chemical Progress Week, April 23-28.
Chemical Specialties Manufacturers Association, mid-year meeting, Drake hotel, Chicago, May 20-22.
Drug, Chemical and Allied Trades Section of the New York Board of Trade, annual outing, Pocono Manor Inn, Pocono Manor, Pa., September 27-29.
Federation of Paint and Varnish Production Clubs, annual meeting, Cincinnati, Ohio, October 21-24.
Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 7-9.
National Association of Purchasing Agents, annual convention, Public Auditorium, Cleveland, Ohio, May 20-23.
National Paint, Varnish and Lacquer Association, annual convention, Statler, Ambassador and Biltmore hotels, Los Angeles, November 12-14.
Proprietary Association, annual meeting, Hollywood Beach hotel, Hollywood, Fla., May 7-9.
Society of Chemical Industry, chemical industry medal presentation, Waldorf-Astoria hotel, New York, April 27.
Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, April 12; annual outing, Skytop Lodge, Skytop, Pa., May 16-18; annual meeting and dinner, Biltmore hotel, New York, December 3.
Toilet Goods Association, annual meeting, Waldorf-Astoria hotel New York, May 15-17.

ACS New York Unit Readies Program on Professional Gains

A new method for making certain sulfa drugs, progress in cancer research and technics for analyzing atmospheric odorants will be among the advances in chemistry and chemical engineering to be reported in ninety-four technical papers at the annual scientific conference of the American Chemical Society's New York section Friday, March 16, at the Washington Square Center of New of New York University.

Prof. Robert B. Woodward of Harvard University will receive the section's William H. Nichols medal for original research in chemistry at a dinner in the New Yorker hotel following the technical program. Prof. Woodward will speak on "Recent Advances in the Chemistry of Natural Products."

Swedish Chemist to Address Parley

An outstanding Swedish chemist, Prof. Holger Erdtman of the Royal Institute of Technology, Stockholm, will address a session on organic chemistry in Lassman Hall of the university's Commerce Building at 2 o'clock. His topic will be "Chemistry in Relation to Plant Taxonomy." Taxonomy is the branch of science dealing with classification.

Technical sessions in five major fields of chemical science and industry and a panel

—Continued on page 58

DIVISION MANAGER: George W. Russell, who has become general manager of American Cyanamid Company's industrial chemicals division, New York (OPD, 3/5/56).

Tide Water Will Spend $195 Million This Year

Tide Water Associated Oil Company, New York, has announced that capital expenditures budgeted for 1956 will reach a new high of $195 million. Much of the sum is slated to finance building of refineries in Delaware and California, and large amounts will be spent on exploration.

Soybean Output Reaches Record High

World production of soybeans in 1955 is estimated by Foreign Agricultural Service at 762,000,000 bushels. This confirms the November forecast of a record crop, exceeding 1954 estimated output by six percent and average prewar production by 64 percent.

Four-fifths of the estimated 45-million bushel increase from 1954 occurred in the free areas of the world, with the United States alone accounting for 30 million bushels. One-fifth of the increase occurred in China-Manchuria.

While supplies of soybeans for the 1955-

—Continued on page 38

Pharmaceutical Advertising Creativity is Essential Property, Bristol Tells Drug Ad Men

Creativity is a must in the highly specialized field of advertising to the professions, although there are many who sometimes forget that fact, declared Lee H. Bristol, jr., advertising manager of Bristol-Myers Products Division of Bristol Laboratories, New York, in a speech "Imagination—No Drug on the Market" delivered before the Pharmaceutical Advertising Club luncheon, at the Roosevelt hotel, New York, last week.

According to Mr. Bristol, "No matter how tight our economy becomes, there is one shortage we cannot afford to put up with in our business—the shortage of ideas."

Another point made was that "creativity in selling goods and services cannot be limited solely to the so-called agency 'creative departments', art and copy; for creativity ought properly to be a part of every phase of marketing today."

'Brainstorming' Method Explained

Mr. Bristol, in the interest of explaining the workings of idea-producing technics, elaborated on the "brainstorming" method devised by Alex Osborne, a cofounder of Batten, Barton, Durstine & Osborne.

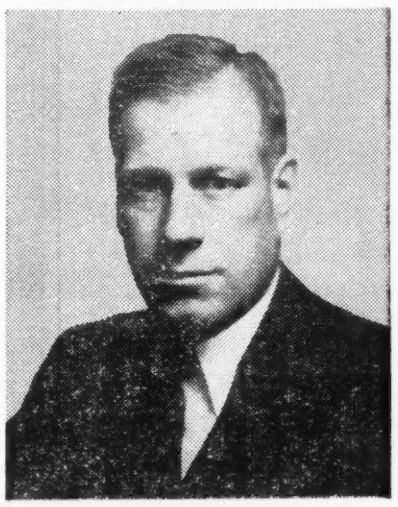
The four Osborne rules for brainstorming, as Mr. Bristol pointed out, are:—

1. Judicial judgment is ruled out. Criticism must be withheld until later, as creativity is thwarted if a critical attitude is maintained at the same time.
2. "Free wheeling" is welcomed. A wild idea may suggest a practical one.
3. Quantity is wanted. The greater the quantity of ideas, the more likelihood of "winners."
4. Combination, embellishment and improvement are sought.

To begin brainstorming, according to Mr. Bristol, a panel is needed with a carefully picked chairman, who is able to be both a driver and yet keep the discussion informal and comfortable.

An "idea collector" is also needed, as an assistant chairman, whose task it is to record, follow up, and arrange. An important feature of the panel is to have only one level of management present.

A "brainstorm" topic, according to Mr. Bristol, should not be too general, in order to prevent a "buckshot" approach.



SALES MANAGER: Franklin King, jr., appointed manager of paint industry sales of "Wollastonite" and "Cab-o-sil" for Godfrey L. Cabot, Inc., Boston, Mass.

Polythylene Unit Slated By Koppers, Brea in L. A.

Koppers Company, Pittsburgh, Pa., and Brea Chemicals, Inc., Los Angeles, a subsidiary of Union Oil Company of California, have announced plans to begin immediate construction of a low-pressure polyethylene plant in Los Angeles County. The project will cost in excess of $10 million.

The plant, to be constructed and operated as a joint venture by the two companies, will be located at Wilmington avenue and Sepulveda boulevard, in Los Angeles County, North of Wilmington. It is expected to be in operation by mid-1957.

The Brea-Koppers plant will produce the new rigid-type polyethylene which has higher tensile strength, greater heat resistance and other new properties.

Vitro Corporation Obtains Uranium Prospectors Firm

Vitro Corporation of America, New York, has acquired Uranium Prospectors Company, Grand Junction, Colo., which will become a wholly-owned subsidiary of Vitro.

Uranium Prospectors Company has been mining a carnotite type of uranium ore, chiefly at a location near Green River, Colo., where the company has large reserves. It is expected that about 1,500 tons per month of such ore will be milled and processed at the Salt Lake City, Utah, mill of Vitro Uranium Company, a division of Vitro.

Drug Group Set For Technical Parley

Reports by subcommittees and discussions on criteria for identity and purity will be among the features of the sixty-sixth meeting of the Combined Pharmaceutical Contact Committee of American Drug Manufacturers Association and the American Pharmaceutical Manufacturers Association.

The meeting will be held March 13 and 14 at the Washington hotel, Washington, D. C.

Reports are expected to be submitted by numerous subcommittees, Frank O. Taylor, chairman, said, while extended discussion is planned on the general subject of replacing some of the present criteria for identity and purity of various organic chemicals by others having greater accuracy and ease of application.

Among the reports to be submitted will be those by subcommittees on the following subjects:—Bacatracin standards; cascara assay; desiccating substances used in tests or assays; foreign particles test for chemicals; infra-red spectroscopy and its applications; PAS standards and tests; plastic containers associated with blood transfusion; rubber closures for parenteral solutions; and tablets and tablet tests, with special reference to modified forms of disintegration tests.

Western Chemical Group To Hear Speech by Ewell

Dr. Raymond H. Ewell, industrial research consultart for the US Operations Mission to the Philippines, will review the present status of the chemicals industry in the Philippines, and the market for American chemical products in that area, at the March meeting of the Western Chemical Market Research Group, at Marine's Memorial Club, San Francisco, March 15.

Tallow, Grease Exports of US at Record in 1955

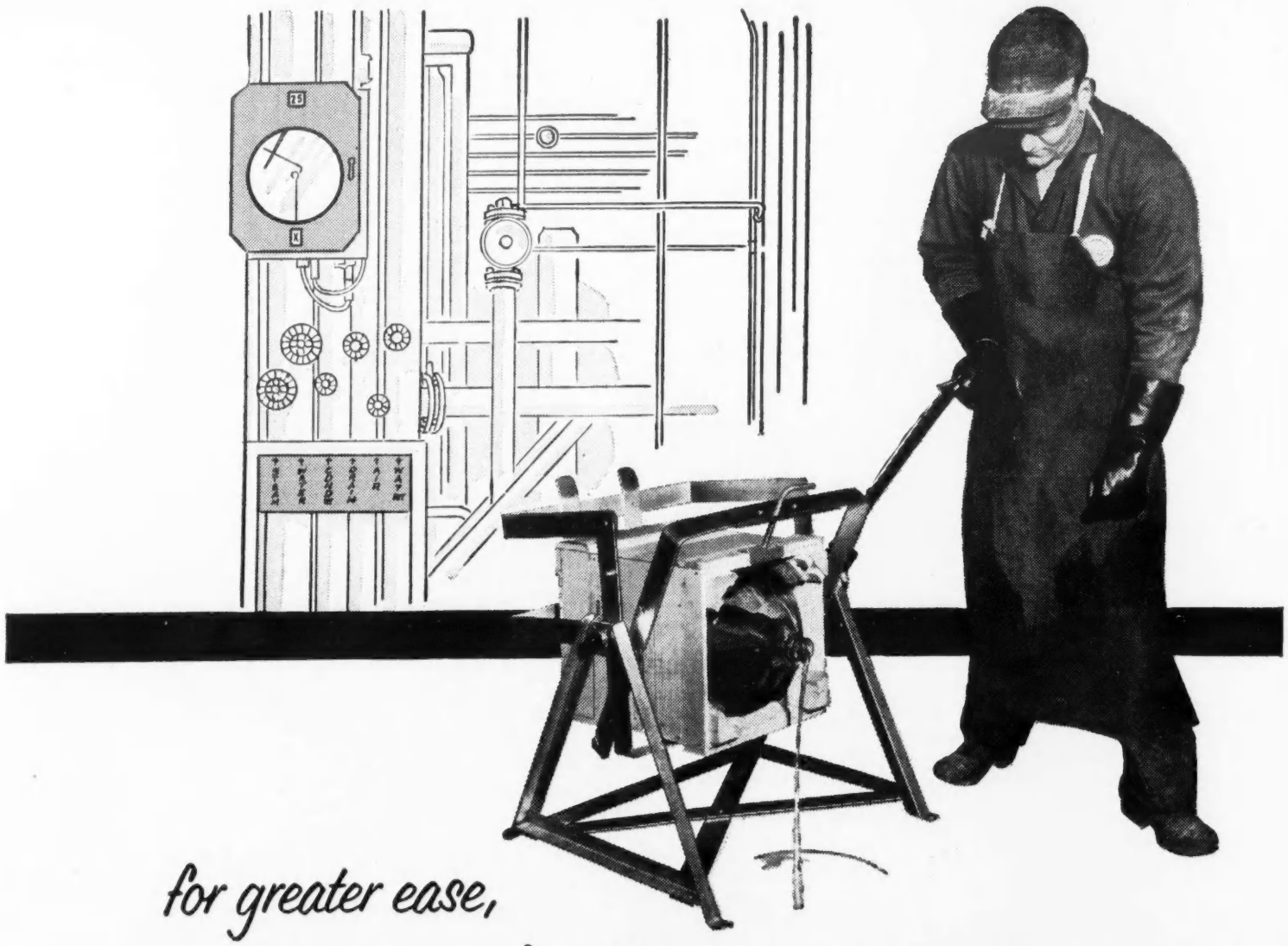
United States exports of tallow and greases reached a record 1,311,000,000 pounds in 1955 as against 1,198,000,000 pounds in 1954, according to the Foreign Agricultural Service. The average exports for 1935-39 were only 21,000,000 pounds.

The high level of shipments during and since the war is largely the result of rapidly increased production and the declining use of inedible tallow and greases in the manufacture of soap, the agency said.

Of the total 1955 exports, all but 16 million pounds were classified as inedible products. The low prices and standard high quality of United States tallow and grease were factors contributing to the record export in the past year.

Western Europe continued as the major area outlet for United States inedible tallow and greases with 57 percent of the total shipments. Shipments to the Netherlands, the largest single destination, Italy and Belgium were up substantially and exports to western Germany were down only slightly.

Exports to Japan, second only to the Netherlands, were up and constituted the bulk of the quantity going to Asia. However, increases also occurred in shipments to Korea, the Philippine Republic and Taiwan. Mexico, Cuba, and Canada were the principal North American destinations, and Egypt and the Union of South Africa the major outlets in Africa.



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economy, safety- **Baker REAGENT ACIDS**

in the **6½ GALLON CARBOY!**

The Baker 6½-gallon carboy was developed and introduced for Baker customers who prefer a smaller, lighter carboy than the 13-gallon size. They asked for: labor-saving, one-man handling—greater safety—added protection of purity—more economical storage—lower freight cost.

For your easy review, the plus-values of the Baker 6½-gallon carboy are detailed below. You'll find they contribute to increased operating efficiencies:

EASIER HANDLING—One-man pouring and stacking. Sideposts are short—containers can be brought close to the lip of the carboy.

MORE EFFICIENT STORAGE—Flat top for easier stacking—lower space requirements per pound of acid. (The 6½-gallon carboy occupies 2.85 cubic feet *versus* 7.62 for the 13-gallon carboy. 50% more acid can be stored or shipped in same amount of space.)

LOWER FREIGHT COST—Estimated as 25-35% lower for LCL or LTL shipment, and comparable for carloads or truckloads.

GREATER SAFETY AND PROTECTION OF PURITY—The 6½-gallon bottle is stronger. It can be emptied easily and safely by pouring or siphoning. Special lip construction permits cleaner pouring. Screw cap covers pouring lip—caps are interchangeable. Polyethylene cap-liners provide complete sealing. The carboy box top is flat, covers completely, and is easily removable for pouring and inspection.

Whichever carboy you specify—the 6½-gallon or 13-gallon size—Baker high-purity Reagent Acids will continue to be your best buy!

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Phillipsburg, New Jersey

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, March 9 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Acacia (see Gum arabic).
Acenaphthene, below 92.5 C., m.p., dms., works lb. .40 - —
above 92.5 C., m.p., bbls., dms., works lb. .41 - .50
Acetaldehyde 99% dms. c.l., dlvd. lb. .12 - —
l.c.l., dlvd lb. .13½- —
tanks, dlvd lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .29 - —
ton lots lb. .30 - —
smaller lots lb. .33 - —
USP, bbls. 2,000-lb. lots lb. .80 - —
smaller lots lb. .81 - .88
Acetic anhydride, dms., c.l., dlvd. E. lb. .15½- —
l.c.l., dlvd. E lb. .17 - —
tanks, dlvd. E lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd. lb. 1.35 - —
l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd. lb. .82 - —
l.c.l., dlvd lb. .83 - —
Acetone, CP, dms., c.l., dlvd. lb. .09 - —
l.c.l., dlvd lb. .10 - —
tanks, dlvd lb. .07 - —
Methyl (see M).
Acetonitrile, dms., c.l., works lb. .45 - —
l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt. equald. lb. 1.17 - 1.19
Acetophenole, cns., dms. lb. 1.21 - 1.85
tech., dms., l.c.l., works lb. .75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb 1.75 - 1.85
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .36 - —
l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks frt. alld. E. of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
l.c.l., frt. alld E. of Denver, lb. .40 - —
tanks, frt. alld. E. of Denver, lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —
Acid, abietic, coml., dms., c.l., works lb. .12 - —
l.c.l., ex whse lb. .1490- —
cryst., dms. c.l. works lb. .06½- —
l.c.l., works lb. .07 - .07½
Acetic, coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls 100 lbs 8.25 - —
70%, bbls 100 lbs. 9.95 - —
80% bbls 100 lbs. 10.45 - —
glacial, syn. CP, dms., dlvd. 100 lbs. 15.00 - 16.00
tech. dms. c.l. dlvd 100 lbs. 12.00 - —
l.c.l., dlvd 100 lbs. 13.00 - —
tanks, dlvd 100 lbs. 10.00 - —
USP chys., inclusive, dlvd., 100 lbs. 24.00 - 25.00
Acetic anhydride (see Acetic anhydride above).
Acetylsalicylic, USP, special, makers, primary distrib., bbls., 1,000-lb lots, point of shipt lb. .61 - —
standard, fine, cryst., gran., (30-40 mesh) powd., (60 mesh) bbls., 1,000-lb. lots. lb. .56 - .58
Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Adipic, bgs., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .37¾- —
Aminoacetic, NF, bbls., frt. adjusted lb. 1.50 - 1.75
p-Aminobenzoic, tech., dms., works lb. 1.74 - 1.77
USP, dms., 1,000-lb. lots or more, works lb. 2.50 - —
smaller lots, works lb. 2.55 - 2.60
p-Aminosalicylic, dms., 1,000-lb. lots or more, frt. adjusted lb. 4.25 - —
smaller lots, same basis lb. 4.30 - 4.75
Anthranilic, 99%, 150-lb. dms., dlvd. lb. 1.10 - —
Arsenous, tech. (see Arsenic, white).
USP (see Arsenic trioxide).
Ascorbic USP, dms., 25-100 kilo lots kilo. 12.00 - —
10-kilo lots kilo. 12.35 - —
5-kilo lots kilo. 12.75 - —
bots, 1-kilo lots kilo. 13.00 - —
500-gram lots kilo. 13.50 - —
Battery, chys., c.l., works, E. 100 lbs. 2.35 - —
l.c.l., works, E. 100 lbs. 2.65 - 3.45

Acid, benzoic, tech., bbls., dms., 100-lb. lots or more lb. .44 - —
USP, bbls., dms., 100-lb. lots or more lb. .54 - —
Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).
Betaoxynaphthoic (see Acid b-Oxynaphthoic).
Boric, tech., 99.9%, cryst., bgs., c.l., works ton. 126.75 - —
ton lots, ex whse, N. Y. or Chi ton. 176.50 - —
smaller lots, same basis. ton. 181.50 - —
dms., c.l., works ton. 151.25 -172.25
ton lots, ex whse, N. Y. or Chi ton. 201.00 -222.00
smaller lots, same basis. ton. 206.00 -227.00
gran., bgs., c.l., works ton. 101.75 - —
ton lots, ex whse, N. Y. or Chi ton. 151.50 - —
smaller lots, same basis. ton. 156.50 - —
dms., c.l., works ton. 126.25 -147.25
ton lots, ex whse, N. Y. or Chi ton. 176.00 -197.00
smaller lots, same basis. ton. 181.00 -202.00
bulk, c.l., works ton. 95.75 - —
ton. 161.50 - —
Acid, boric, tech., 99.9%, powd., bgs., c.l., works ton. 106.75 - —
ton lots, ex whse, N. Y. or Chi ton. 156.50 - —
smaller lots, same basis ton. 161.50 - —
dms., c.l., works ton 131.25 -152.25
ton lots ex whse N. Y. or Chi ton. 181.00 -202.00
smaller lots, same basis. ton. 186.00 -207.00
Boric acid in kegs $40.50 per ton higher than in paper bgs USP boric Acid $25 per ton higher.
Broenners, bbls lb. 1.76 - —
Butyric, 99%, dms., c.l., works lb. .34 - —
l.c.l., works lb. .34½- —
tanks, works lb. .32½- —
Capric, dms lb 24 - .26
Caprylic, dms. lb. .24 - .26
Cassella, dms., frt. alld., 100% basis lb. 1.44 1.75
Castor oil, split, dms lb .35½ .36
Chicago bbls frt alld lb 3.21 —
Chloroacetic, mono- purif., flake, 99% dms lb. 23½- .25½
tech. flake, 96-97%, dms., frt. equald lb. .20 - .21
o-Chlorobenzoic, fib. dms., t.l., works lb. 1.10 - —
smaller lots, works lb. 1.25 - —
Acid, p-chlorobenzoic, fib. dms., 2,000 lbs. or more, works lb. 2.25 - —
less than 2,000 lbs., same basis. lb. 2.30 - —
Chlorosulfonic, dms., c.l., frt. equald. lb. .0463- —
l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Acid, chlorosulfonic, in stainless steel dms. ½c. per lb. higher.
Chromic, 99¾%, dms., c.l., works, frt. equald lb. .28½- —
l.c.l., dlvd., N. Y. metropolitan area lb. .29 - .30
NF (see Chromium trioxide).
Cinnamic, refd., bots lb 2.50 - 3.50
Citric, USP, anhyd., gran., fine gran., bgs., dms., c.l. lb. .29½- .30
10,000-lb. lots, 1 shipt. lb. .30 - .30½
smaller lots lb. .30½- .31
hydrous, gran., fine gran., bgs., dms., c.l lb. .27½- .28
10,000-lb lots, 1 shipt. lb. .28 - .28½
smaller lots lb. .29 - .29½
Powdered citric acid ½c. higher.
Cleve's, mixed, bbls lb. .79 —
Coconut oil, dist., dms. lb. .23¾- .25¾
tanks lb. .21¾- —
dbl. dist., dms. lb. .23¾- .26¾
tanks lb. .21¾- .22¾
Corn oil, dist., dms. lb. .15¾- .17¾
tanks lb. .13¾- —
Cottonseed oil, dist., dms. lb. .15¼- .17¼
tanks lb. .13¼- —
2,3-Cresotic, dms. ton lots, works lb. .70 - —
less than ton lots, works lb. .72 - —
Cresylic, coaltar dom. 50% 207 C or above, resin and tricresyl phosphate grade tanks, frt. equald gal. 1.10 - —
50% 210° C. or above, total range over 9° C., non-resin grade, dms., c.l., same basis gal. 1.15 - —
l.c.l., same basis gal. 1.19 - —
tanks, same basis gal. 1.00 - —
50% 204° to 207° C., tricresyl phosphate and resin grade, tanks, same basis gal. 1.20 - —
imp. 75% at 215 C., or over, dms., ex whse gal. .85 1.00
petroleum, dom., 195° to 214° C., non-ret. 65 dms. to c.l., works San Francisco and Los Angeles gal. .80 - —
l.c.l., same basis gal. .82 - .84
tanks, works frt alld E. gal. .65 - —
200° C. to 222° C., tanks, Wilmington, Cal lb. .63 - .72
211° C. to 237° C., non-ret. dms. c.l., San Francisco and Los Angeles gal. .76 - —
l.c.l., same basis gal. .78 - .80
tanks, same basis gal. .61 - —
220° C. to 242° C., tanks, Wilmington, Cal lb. .62 - .67
245° C. to 295° C., tanks, Wilmington, Cal gal. .50 —
Crotonic fib dms., 200 lbs. or more, contained, works lb. .50 - —
Cyanoacetic, tech., bbls lb. .90 1.25
Dichlorophenoxyacetic (see 2,4-D).
Diethylbarbituric (see Barbital).
Diglycolic, bgs., works lb. .14 - —
2-ethyl hexoic, dms., c.l., dlvd lb. .39½- —
l.c.l. dlvd. lb. .37½- —
tanks, dlvd lb. .34½- —
F, crude, paste bbls. works lb. 2.10 —
Folic, bots fib cns kilo-lots or more gram. 1.40 —
Formic, 85% chys., c.l. works lb. 1570- —
l.c.l., works lb. .1620- .1720
90% chys. c.l. works lb. .1625 —
l.c.l. works lb. .1675 .1775
Fumaric, tech., bgs., dms., c.l., frt. alld. E lb. .25½- —
l.c.l., same basis lb. .26½- —
Gallic, NF VII bbls. 1,000 lb lots lb. 1.90 —
smaller lots lb. 1.82 - 2.00
tech., bbls., 1,000-lb lots lb 1.58 —
smaller lots lb. 1.82 2.00
Gamma, dry, grd. bbls. frt alld. lb. 1.50 - —
paste bbls frt alld lb 1.45 - —
Gentisic, 100-lb fib dms lb 8.50 —
Gluconic, tech., 50% bots lb .25 .35
chys. lb. .19 —
dms. lb. 15¼- —
l-Glutamic, 99½% fib dms., 100-lb. lots, works lb. 2.00 - —
25-lb. lots, works lb. 2.03 - —
Glycerophosphoric, 35%, dms., works lb 2.25 2.33
Glycolic (see Acid hydroxyacetic).
H, dry, bbls., c.l., works, 100% basis lb. 1.00 - —
l.c.l., same basis lb. 1.02 - —
Hydriodic, 1.50 s.g., chys lb. 2.94 - —
1.70 s.g., chys lb. 3.23 - —
Hydrobromic, medicinal, 48%, chys., dlvd. E lb. .37 - .43
Hydrochloric, anhyd (see Hydrogen chloride).
18° chys., c.l., works 100 lbs 2.50 - —
l.c.l., dlvd. Metropolitan area 100 lbs. 2.90 3.05
tanks, works, frt. equald ton. 28.00 - —
20° chys., c.l., works 100 lbs. 2.75 - —
l.c.l., dlvd Metropolitan area 100 lbs. 3.15 - —
tanks, works, frt. equald ton. 30.00 - —
22°, chys., c.l., works 100 lbs. 3.25 - —
l.c.l. dlvd Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald ton. 35.00 - —
CP, USP, consumers, chys., extra c.l., works lb. .11¾- —
l.c.l., same basis lb. .13¼- .13¾
5-pint bots., extra, cs., c.l., same basis lb. .16¾- —
l.c.l., same basis lb. .18¼- .19¼
Acid, hydrochloric, CP, USP, prices to dealers 1½c. per lb. less.
Hydrocyanic cyls. frt alld lb. .75 .93
dilute NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric, anhyd. (see Hydrogen fluoride).
aqueous, tanks, works lb. .21 - —
70%, steel, dms., works lb. .18½- .22½
Hydrofluosilicic, dms., works, 30% basis lb. .06 - —
Hydroxyacetic, tech., 70%, non-ret bbls., Phila., 100% basis lb. .136 - —
tanks, Belle, W Va., 100% basis lb. .095 - —
Hypophosphorus, purif., 50%, chys lb. 1.30 - 1.32
USP, chys. lb. .88 - —
Isonicotinic, 100-lb. fib. dms., works lb. 5.00 - —
Hydrazide (see Isoniazid).
Itaconic, fib. dms., c.l., works lb. .59 - —
l.c.l., works lb. .60 - —
J, paste bbls., works, 100% basis. lb. 2.45 - —
powd., bbls., same basis lb. 2.50 - 2.85
Koch, bbls., frt. alld., 100% basis. lb. 1.00 - —
L, bbls., works lb. 1.25 —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	NNR	New and Nonofficial Remedies
amorph.	amorphous	djns.	demijohns		
AMP	American melting point	dlvd.	delivered	No.	number
anhyd.	anhydrous	dms.	drums	nom.	nominal
a.p.a.	available phosphoric acid	dom.	domestic	o-	ortho
approx.	approximately	E.	east	ord.	ordinary
artif.	artificial	e.p.	end point	oz.	ounce
ASTM	American Society for Testing Materials	equald.	equalized	p-	para
		exp.	expressed	Pac.	Pacific
Atl.	Atlantic	F.	fahrenheit	pf.	proof
Be.	Baume	ferment.	fermentation	phos.	phosphate
bbls.	barrels	f.f.a.	free fatty acid	photo.	photographic
bgs.	bags	f.f.c.	free from chlorine	pkgs.	packages
bls.	bales	fib.	fiber	powd.	powdered
bots.	bottles	f.o.b.	free on board	precip.	precipitated
b.p.	boiling point	f.p.a.	free of prussic acid	prod.	producer
b.p.l.	bone phosphate of lime	frt.	freight	pt.	point
b.r.	boiling range	gal.	gallon	pulv.	pulverized
bxs.	boxes	gran.	granular	purif.	purified
C.	centigrade	grd.	ground	redist.	redistilled
cbys.	carboys	i.&a.	iron and aluminum	refd.	refined
CD	completely denatured	i.b.p.	initial boiling point	refy.	refinery
c.i.f.	cost, insurance, freight	imp.	imported	reg.	regular
cks.	casks	incl.	included	resub.	resublimed
c.l.	carlots	indust.	industrial	ret.	returnable
cns.	cans	kgs.	kegs	SD	specially denatured
coml.	commercial	l-	laevo	s.d.	single distilled
conc.	concentrated	lacq.	lacquer	S. E.	southeast
CP	chemically pure	lb.	pound	sec.	secondary
cps.	centipoises	l.c.l.	less than carlots	secs.	seconds
cryst.	crystal	l.t.l.	less truckload	s.g.	specific gravity
cs.	cases	liq.	liquid	ship't	shipment
ctns.	cartons	mfrs.	manufacturers	soln.	solution
cyls.	cylinders	m-	meta	s.u.	standard unit
d-	dextro	m.a.p.	mixed aniline point	syn.	synthetic
dbl.	double	min.	minimum	tanks.	railroad tankcars
denat.	denatured	m.p.	melting point	tech.	technical
dest-dist.	destructive-distilled	N-	nitrogen	tert-	tertiary
dl-	dextro-laevo	n-	normal	t.l.	truck loads
dist.	distilled	nat.	natural	t.w.	tank wagons
		neut.	neutral	USP	U. S Pharmacopoeia
		NF	National Formulary	vis.	viscosity
				VM&P	varnish makers & painters
				W.	west
				whse.	warehouse
				w. w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Acid, lactic, edible, 50%, bbls., 20 or more lb. .1754- .215
smaller lots lb. .1854- .225
80%, bbls., 5 or more lb. .3054- .37
smaller lots lb. .3104- .375
plastic grade, 50%, bbls., 20 or more, works lb. .23 - —
1 to 19 lb. .235 - —
80%, bbls., 5 or more lb. .385 - —
tech., 22%, bbls., c.l., works 100 lbs 6.30 - —
l.c.l., works 100 lbs 6 70 - —
cbys., l.c.l., works 100 lbs. 12.20 - —
44%, bbls., c.l., works 100 lbs. 11.45 -11.95
l.c.l., works 100 lbs. 11.85 -12.35
USP, 85%, cbys. lb. .85 - .88
Laurent's, bbls lb. .60 - —
Laurie, 90%, dms lb. .25½- .37½
Linseed oil, dist., dms lb. .2170- —
w.w., dms. lb. .2470- —
Maleic, cryst., powd. dms lb. .37 - .38
Malic, tech., dms lb. .50 - —
Mandelic, NF, dms., 1,000-lb. lots, lb 2.35 - —
smaller lots lb 2.40 2.50
Metanilic, dms., works lb. .57 - .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .54½- —
smaller lots, works lb. .55 - —
Molybdic, 85%, dms., works lb. 1.15 - —
Monochloroacetic, purif. (see Acid, Chloroacetic mono-).
Muriatic (see Acid, hydrochloric).
Myristic, dms lb. .25 - .27

Acid, 1-Naphthol-4-sulfonic (see Acid, Neville and Winthers).
1-Naphthol-5-sulfonic (see Acid, L).
1-Naphthol-5-sulfonic, 8-amino (see Acid, S).
1-Naphthol-3,6-disulfonic, 8-amino (see Acid, H).
2-Naphthol-6,8-disulfonic (see Acid, Gamma).
5-Naphthol-7-sulfonic, 2-amino (see Acid, J).
Naphtholsulfonic, mixed (see Acid, Cleve's).
1-Naphthylamine-5-sulfonic (see Acid, Laurent's).
2-Naphthylamine-4,8-disulfonic (see Acid, Cassella).
2-Naphthylamine-6-sulfonic (see Acid, Broenner's).
2-Naphthylamine-7-sulfonic (see Acid, F).
2-Naphthylamine-1-sulfonic (see Acid, Tobias).
Nevile and Winther's, dms., frt. alld lb. 1.20 —
Nicotinic, USP, dms., dlvd kilo. 8.00 - 8.30
Amide, USP (see Nicotinamide)
Nitric, 36° Be, cbys., c.l., works, E 100 lbs. 5.75 —
l.c.l., works, E 100 lbs. 6.05 - 6.85
38° Be, cbys., c.l., works, E. 100 lbs. 6.25 —
l.c.l., works, E 100 lbs. 6.55 - 7.35
40° Be, cbys., c.l., works, E. 100 lbs. 6.75 —
l.c.l., works, E 100 lbs. 7.05 - 7.85
42° Be, cbys., c.l., works, E. 100 lbs. 7.25 —
l.c.l., works, E 100 lbs. 7.55 - 8.35
58.5 to 68% HNO3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO3, tanks, works, 100% basis 100 lbs. 4.90 - —

Acid, nitric, CP, NF, consumer, cbys., extra, c.l., works lb. .13½- —
l.c.l., same basis lb. .11¼- .11¾
5-pt. bots., extra, cs., c.l., same basis lb. .17½- —
l.c.l., same basis lb. .14¾- .20¾
p-Nitrobenzoic, dms., c.l., works lb. .72 - —
l.c.l., works lb. .73 - —
Oleic, s.d., dms. lb. .18 - .20
tanks lb. .16 - —
dbl. dist. (white), dms. lb. .20 - .22
tanks lb. .18 - —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Creosotic).
Oxalic, bbls., c.l., works lb. .16½- —
10,000-lb. lots, works lb. .16¾- —
smaller lots, works lb. .17¾- —
b-Oxynaphthoic, fib. dms., 250 lbs. or more, frt. alld lb. 1.14 - 1.17
Palm. dist., dms. lb. .14¼- .16¼
tanks lb. .12¼- —
Para-aminobenzoic (see Acid, p-Aminobenzoic).
Para-aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid, p-Chlorobenzoic)
Paramethylphenyleinchonic (see Neocinchophen)
Paranitrobenzoic (see Acid, p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid, p-Toluidine m-sulfonic)
Phenylacetic, pure, cryst. cns. lb 75 1.70
Phenylcinchoninic (see Cinchophen).
Phenylglycolic (see mandelic).
Phosphoric, food grade, 75%, cbys., c.l., frt. alld. E 100 lbs. 6.75 - —
l.c.l., works 100 lbs. 7.00 - 8.00
tanks, works 100 lbs. 5.35 - —
80%, cbys., c.l., frt. alld. 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 7.85 - 9.10
NF, 85%, cbys., c.l., works lb. .0825- —
l.c.l., works lb. .0850- .0975
tanks, works lb. .0640- —

Acid, picric, NF, bbls. lb. .60 - —
tech., bbls lb. .34 - .35
Propionic, syn., pure, dms., c.l., frt. alld. lb. .23¾- —
l.c.l., frt. alld lb. .23¾- —
tanks, frt. alld lb. .20¾- —
Pyrogallic, NF, (see Pyrogallol).
tech., bbls lb. 2.76 2.99
Ricinoleic (see Acid, castor oil, split).
S., bbls., works lb. 3.25 - —
Salicylic, crude, fib. dms., c.l., frt. alld lb. .35 - —
l.c.l., frt. alld. on 100 lbs. or more lb. .36 - —
sublimed, tech., fib. dms., c.l., dlvd lb. .37 - —
l.c.l., dlvd. lb. .41 - —
USP, cryst., fib. dms lb. .48 - —
powd., fib. dms lb. .55 - —
Sebacic, purif., dms., c.l., works lb. .59 - —
l.c.l., works lb. .61 - .65
Soybean oil, dbl. dist., dms. lb. .17¾- .19¾
tanks lb. .15¾- —
s.d., dms. lb. .16¼- .18¼
tanks lb. .14¼- —
Stearic, dbl. pressed, bgs. lb. .14¾- .16¾
single pressed, bgs. lb. .14¼- .16¼
triple pressed, bgs. lb. .17 - .19
Succinic, purif., cryst., bbls., works lb. .62 .75
Sulfanilic, tech., dms., c.l., frt. alld lb. .19 - —
l.c.l., frt. alld lb. .21 - —
Sulfuric, 60° Be, cbys., c.l., works 100 lbs 2.00 - —
l.c.l., works 100 lbs 2.45 - —
tanks, works ton 18.00 - —
66° Be, cbys., c.l., works 100 lbs 2.25 —
l.c.l., works 100 lbs. 2.55 3.35
tanks, works ton 22.35 —
98% tanks, works ton 23.50 - —
99-100%, tanks, works ton 23.95 —
CP, NF, consumers, cbys., extra, c.l. works, frt. equald lb. .09¾- —
l.c.l., same basis lb. .11¼- .11¾
5-pt. bots., extra cs., c.l., works, frt. alld lb. .13¼- —
l.c.l., same basis lb. .14¾- .20¾
fuming (oleum), 20%, tanks, works ton 25.00 - —
40%, tanks, works ton 29.00 - —
65% tanks, works ton 39.50 - —
Tallow, dist., dms. lb. .14¾- .16¾
tanks lb. .12¾- —
hydrogenated, dms. lb. .13¾- .15¾
Tannic, NF, fluffy, bbls., 1,000-lb. lots lb. 2.05 —
smaller lots lb. 2.06 - 2.10
powd., bbls., 1,000-lb. lots lb. 1.95 —
smaller lots lb. 1.96 - 2.01
tech., dms lb. 1.05 - —
Tartaric, USP, dom., 230 or 250-lb. dms., c.l. lb. .47 - —
10,000-lb. lots, 1 shipt lb. .47½- —
smaller lots lb. .48 - —
100-lb. dms. lb. .49 - —
imported lb. .39½- .40
Thioglycolic, refd., cbys., 100% basis lb 1.35 1.55
Tobias, bbls., frt. alld lb. .81 - —
Toluenesulfonic, dms. c.l. works, lb. .16 —
l.c.l., works lb. .17½- —
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l lb .90 - —
125 lbs to t.l lb 1.00 - —
p-Toluidine-m-sulfonic, bbls., works lb .92 1.04
Trichloroacetic, bots. lb. 2.00 2.50
Trichlorophenoxyacetic (see 2,4,5-T).
Tungstic, tech., kgs., works lb 4.25 —
Undecylenic, dms lb 1.40 —
Aconite root, bls lb. .50 - .55
Acrolein, tech., dms., c.l., works lb .47 —
l.c.l., works lb .47½- —
tanks, works lb. .46 - —
Acrylonitrile, dms., c.l., t.l., works. lb. .30 - —
l.c.l., t.t.l., works lb. .31 - —
tanks, works lb. .27 - —
ACTH, cryst., bulk, 1,000 units/gram, bots gram 15.00 - —
Adeps lanae (see Lanolin).
Adrenocorticotropic hormone (see ACTH).
Agar, USP, Kobe No. 1, strip, bls. lb 3.00 3.25
powdered, 30 mesh, fib., dms lb 3.40 3.50
dl-Alanine dms., works lb 8.50 11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms. lb. .65 - .90
Egg, edible, cryst., powd., bbls. lb. 2.24 - 2.26
flake lb. 2.20 - 2.22
tech., cryst., bbls lb. .83 - .90
Alcohol, allyl, dms., c.l., dlvd lb. .32 - —
l.c.l., dlvd lb. .33 - —
tanks, dlvd lb .30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°-132°C., dms., l.c.l., dlvd lb. .43 - —
ACS grade, dms., c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .17½- —
l.c.l., frt. alld lb. .18½- —
tanks, frt. alld lb. .15½- —
primary, dms., c.l., frt. alld. lb. 19¼- —
l.c.l., frt. alld lb. .20¼- —
tanks, frt. alld lb. .17¼- —
sec-synthetic, dms., c.l., works, frt. alld lb. .18½- —
l.c.l., works lb. .19½- —
tanks, works lb. .16½- —
tert-synthetic, dms., c.l., frt. alld, E lb. .17½- —
l.c.l., frt. alld E lb. .18½- —
tanks, frt. alld E lb. .15½- —
1-pentanol, (syn. normal), dms., c.l., works lb. .42 - —
l.c.l., works lb. .43½- —
tanks, works lb. .40 - —
2-pentanol, dms., c.l., works lb. .65 - —
l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Benzyl, NF, dms lb. .64 - .79
tech., dms., dlvd lb. .47½- .49
n-Butyl, ferment., dms., c.l., frt. alld lb. .15½- —
l.c.l., frt. alld lb. .16½- —
tanks, frt. alld lb. .13½- —
n-synthetic, dms., c.l., dlvd lb. .15½- —
l.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .13½- —
sec-synthetic, dms., c.l., dlvd. lb. .13½- —
l.c.l., dlvd lb. .14½- —
tanks, dlvd lb. .11½- —
tert-synthetic, dms., c.l., frt. alld. lb. .14 - —
l.c.l., frt. alld lb. .15 - —
tanks, frt. alld lb. .12 - —
Capryl, 95%, dms., c.l., works lb. .21½- —
l.c.l., works lb. .22½- .23¼
tanks, works lb. .19½- —
Cetyl extra, bp. cns., 500-lb. lots or more lb. .73 - —
smaller lots lb. .80 1.15
NF, fib. cns., 140-lb. lots or more lb. .58 .82
smaller lots lb .59 .82
Cinnamic, bots lb 2.15 2.75
Decyl, mixed isomers, dms., c.l., dlvd lb. .23 - —
l.c.l., dlvd. lb. .24 - —
tanks, dlvd. lb. .21 - —
normal (see 1-Decanol).

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3334

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INDUSTRIAL CHEMICALS DIVISION • BALTIMORE 3, MD.

MATHIESON

INORGANIC CHEMICALS: Ammonia • Bicarbonate of Soda • Carbon Dioxide • Caustic Potash • Caustic Soda • Chlorine • Hydrazine and Derivatives • Hypochlorite Products • Muriatic Acid • Nitrate of Soda • Nitric Acid • Soda Ash • Sodium Chlorite Products • Sulphate of Alumina • Sulphur (Processed) • Sulphuric Acid

ORGANIC CHEMICALS: Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Glycol Ether Solvents • Ethylene Dichloride • Dichloroethylether • Formaldehyde Methanol • Sodium Methylate • Hexamine • Ethylene Diamine • Polyamines • Ethanolamines • Polychlorobenzene • Trichlorophenol • Trichlorobenzene

Alcohol, denat. CD12, CD13, CD14, CD17, dms., c.l., dlvd. E. of Rockies	gal.	.56½	—
l.c.l., same basis,	gal.	.61½	.67½
tanks, dlvd. same basis,	gal.	.43½	—
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.			
Proprietary solvent, dms., c.l., dlvd. E. of Rockies	gal.	.59	—
l.c.l., same basis	gal.	.63	.69
tanks, same basis	gal.	.45	—
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.			
SD1, dms., c.l., dlvd. E. of Rockies	gal.	.57½	—
l.c.l., same basis	gal.	.62½	.68½
tanks, same basis	gal.	.44½	—
SD2B, dms., c.l., dlvd. E. of Rockies	gal.	.56	—
l.c.l., same basis	gal.	.61	.67
tanks, same basis	gal.	.43	—
SD3A, dms., c.l., dlvd. E. of Rockies	gal.	.55	—
l.c.l., same basis	gal.	.60	.66
tanks, same basis	gal.	.42	—
SD23A, dms., c.l., dlvd. E. of Rockies	gal.	.57½	—
l.c.l., same basis	gal.	.62½	.68½
tanks, same basis	gal.	.44½	—
SD23H, dms., c.l., dlvd. E. of Rockies	gal.	.58	—
l.c.l., same basis	gal.	.63	.69
tanks, same basis	gal.	.45	—
SD29, dms., c.l., dlvd. E. of Rockies	gal.	.56½	—
l.c.l., same basis	gal.	.61½	.67½
tanks, same basis	gal.	.43½	—
SD30, dms., c.l., dlvd. E. of Rockies	gal.	.55	—
l.c.l., same basis	gal.	.60	.66
tanks, same basis	gal.	.42	—
SD35A, dms., c.l., dlvd. E. of Rockies	gal.	.58	—
l.c.l., same basis	gal.	.63	.69
tanks, same basis	gal.	.45	—
SD40, dms., c.l., dlvd. E. of Rockies	gal.	.56	—
l.c.l., same basis	gal.	.61	.67
tanks, same basis	gal.	.43	—
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.			
Diacetone, acetone-free, dms., c.l., dlvd	lb.	.14	—
l.c.l., dlvd	lb.	.15	—
tanks, dlvd	lb.	.12	—
tech., dms., c.l., dlvd	lb.	.13½	—
l.c.l., dlvd	lb.	.14½	—
tanks, dlvd	lb.	.11½	—
Ethyl 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies	gal.	20.50	—
l.c.l., same basis	gal.	20.55	20.61
tanks, same basis	gal.	20.37	—
tax free, dms., c.l., dlvd. E. of Rockies	gal.	.55	—
l.c.l., same basis	gal.	.60	.66
tanks, same basis	gal.	.42	—
Absolute, 200 pf., tax paid, dms., dlvd. E. of Rockies	gal.	21.60	—
l.c.l., same basis	gal.	21.65	21.71
tanks, same basis	gal.	21.47	—
2-Ethylbutyl, dms., c.l., works	lb.	.29½	—
l.c.l., works	lb.	.30	—
tanks, works	lb.	.28	—
2-Ethylhexyl, dms., c.l., dlvd. E	lb.	.23¾	—
l.c.l., same basis	lb.	.24¾	—
tanks, same basis	lb.	.21¾	—
Furfuryl, cns., works	lb.	.29	—
dms., c.l., Cedar Rapids, Ia	lb.	.21	—
Newark, N. J.	lb.	.21½	—
l.c.l. Cedar Rapids, Ia	lb.	.22	—
Newark, N. J	lb.	.22½	—
tanks, Memphis, Tenn	lb.	.184	—
Hydroabietyl, tech., solid, Zone 1, dms., c.l., dlvd	lb.	.27	—
l.c.l., dlvd	lb.	.27½	—
tanks, dlvd	lb.	.25	—
Isoamyl, dms., c.l., works, frt. alld. E	lb.	.34	—
l.c.l., same basis	lb.	.35	—
tanks, same basis	lb.	.32	—
Isobutyl, dms., c.l., dlvd	lb.	.14½	—
l.c.l., dlvd	lb.	.15½	—
tanks, dlvd	lb.	.12½	—
Iso-octyl, dms., c.l., dlvd. E	lb.	.23	—
l.c.l., dlvd E	lb.	.24	—
tanks, dlvd. E	lb.	.21	—
Isopropyl, refd., 91%, dms., c.l., dlvd	gal.	.50	—
l.c.l., dlvd	gal.	.57	—
tanks, dlvd	gal.	.37	—
95%, c.l., dlvd	gal.	.52	—
l.c.l., dlvd	gal.	.59	—
tanks, dlvd	gal.	.39	—
99%, dms., c.l., dlvd	gal.	.54	—
l.c.l., dlvd	gal.	.61	—
tanks, dlvd	gal.	.41	—
Lauryl, bots	lb.	2.00	2.50
Methyl (see Methanol).			
Methylamyl (see Methyl isobutyl carbinol).			
Octyl, perfumer's grade, bots	lb.	1.75	3.25
tech. (see Octanol, normal).			
2-Phenylethyl, extra, dms	lb.	1.14	1.43
standard, dms	lb.	1.18	1.48
n-Propyl, dms., c.l., dlvd	lb.	.12½	—
l.c.l., dlvd	lb.	.13½	—
tanks, dlvd	lb.	.10½	—
Tetrahydrofurfuryl, cns., Cedar Rapids, Iowa	lb.	.54	—
dms. c.l., Niagara Falls, N. Y.	lb.	.44½	—
l.c.l., Newark, N. J., Cedar Rapids, Ia	lb.	.47	—
tanks, Niagara Falls, N. Y	lb.	.43	—
Indust. grade, dms., c.l., Niagara Falls, N. Y	lb.	.305	—
l.c.l., Newark, N. J., Cedar Rapids, Ia	lb.	.33	—
tanks, Niagara Falls, N. Y.	lb.	.29	—
Tridecyl, mixed isomers, dms., dlvd	lb.	.26	—
l.c.l., dlvd	lb.	.27	—
tanks, dlvd	lb.	.24	—
Wood (see Methanol).			
Aldol, 95%, dms., works	lb.	.23	—
denaturing grade, dms	gal.	2.15	—
Aldrin, tech., fib. dms., c.l., t.l., dlvd	lb.	.80	—
l.c.l., dlvd	lb.	.85	—
Aletris root, bgs	lb.	1.75	1.85
Algin (see Sodium alginate).			
Alizarine (see 1,2-dihydroxy anthraquinone).			
Allethrin, 90%, dms, frt. alld	lb.	28.80	28.90
soln., 20%, dms., 200-2,000 lb. lots, frt. alld	lb.	6.50	6.55
2½%, dms., frt. alld	lb.	.95	1.00
Allspice (see Pimento).			
Allyl bromide, cbys., works	lb.	1.35	1.40
Chloride, dms., c.l., dlvd	lb.	.17	—
l.c.l., dlvd	lb.	.18	—
tanks, dlvd	lb.	.15	—
Starch, solid, dms., works	lb.	.52¾	.54¼
solution, 40% toluol-butanol, dms., works	lb.	.25½	.26¼
Aloe, Cape, cs	lb.	.45	.48
powd., cs	lb.	.50	—
Curacao, kgs	lb.	.50	.55
Aloin, USP, bbls., dms., kgs	lb.	3.75	3.82
Alphanaphthol (see a-Naphthol).			
Alphanaphthylamine (see a-Naphthylamine).			
Alphanitronaphthalene (see a-Nitronaphthalene).			
Alphapicoline (see a-Picoline).			
Alphaterpineol (see a-Terpineol).			
Alphatocopherol (see a-Tocopherol).			
Alum, ammonium, gran., bgs., works 100 lbs		4.30	—
lump, dms., works 100 lbs		5.05	—
powd., dms., works 100 lbs		5.20	—
Alum, ammonium, USP, burnt, dms.	lb.	.20	.21
hydrous, dms.	lb.	.07¾	.08
Potassium, gran., bgs., works. 100 lbs.		4.55	—
lump, dms., works 100 lbs.		5.30	—
powd., dms., works 100 lbs.		5.45	—
USP, burnt, dms	lb.	.20	.21
hydrous, dms	lb.	.07¾	.08
Potash-chrome, dms	lb.	.17	—
Sodium, dms., c.l., works 100 lbs.		4.60	—
l.c.l., works 100 lbs.		5.00	—
Alumina, calcined, bgs., c.l., works.	lb.	.0425	—
l.c.l., works	lb.	.045	.0725
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works	lb.	.14	—
Chloride, coml., anhyd., dms., c.l., works, frt. equald	lb.	.15½	—
l.c.l., works, frt. equald.	lb.	.16	—
cryst., dms., c.l., works	lb.	.1450	—
l.c.l., works	lb.	.1500	—
soln., 32°, cbys., c.l., works	lb.	.0445	—
l.c.l., works	lb.	.0520	.1295
tanks, works 100 lbs.		3.45	—
NF, gran., dms., works	lb.	.29	.30
Fluoride, tech., anhyd., bgs., c.l., works	lb.	.15¾	—
l.c.l., works	lb.	.16¾	.18¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.			
Formate, basic soln., dms., c.l., works	lb.	.12	—
l.c.l., works	lb.	.12½	—
Hydrate, heavy, bgs., c.l., frt. equald	lb.	.0293	—
20,000-40,000 lb. lots, same basis	lb.	.032	—
2,000-20,000 lb. lots, same basis	lb.	.042	—
bulk, same basis	lb.	.027	—
light, bgs., dlvd	lb.	.18	—
Aluminum hydroxide, gel., pharmaceutical, 14-15% Al_2O_3, fib. dms., works	lb.	.22	—
contract, works	lb.	.21	—
9-9½% Al_2O_3, fib. dms., works	lb.	.19	—
contract, works	lb.	.18	—
dried, USP, XIV, fib. dms., works	lb.	.82½	—
contract, works	lb.	.79½	—
tech., powder (see Aluminum hydrate).			
Metal, 99%+, ingots, 10,000-lb. lots, frt. alld	lb.	.2440	—
pigs, 10,000-lb. lots, frt. alld.	lb.	.2250	—
Oxide, amorphous (see Alumina, calcined).			
Paste, lining, extra-fine, dms	lb.	.65½	—
standard grade, dms.	lb.	.45½	—
Powder, lining, extra, fine, dms.	lb.	1.05½	—
standard grade, dms	lb.	.75	—
Aluminum powder and paste prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10-lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.			
Aluminum resinate, precip., 2.1% Al, dms., frt. alld	lb.	.30½	—
Stearate, dibasic, ctns., c.l	lb.	.37	—
l.c.l.	lb.	.38	.42
monobasic, ctns., c.l	lb.	.37	—
l.c.l.	lb.	.38	.42
tribasic, ctns., c.l	lb.	.37	—
l.c.l.	lb.	.38	.42
Sulfate, coml., bulk, c.l., works. 100 lbs		1.85	—
grd., bgs., c.l., works	ton	37.00	—
lump, bgs., c.l., works	ton	40.00	—
iron-free, bgs., c.l., works, frt. equald 100 lbs		3.55	—
l.c.l., works, frt. equald. 100 lbs		3.95	—
Prices $1 per ton higher in the south			
USP, gran., dms., works	lb.	.16	.18
powd., dms., works	lb.	.36	.37
Trihydrate, heavy (see Aluminum hydrate, heavy).			
Ambergris, gray, bots	oz.	8.00	10.00
Aminoazotoluene base, bbls., 100% basis	lb.	1.03	1.18
Aminoethyl ethanolamine, dms., c.l., dlvd	lb.	.46½	—
l.c.l., dlvd	lb.	.45	—
tanks, dlvd	lb.	.45	—
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld	lb.	.44	—
l.c.l., frt. alld	lb.	.45	—
tanks, frt. alld	lb.	.42	—

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by the world's largest producer of synthetic detergent raw materials

Oronite's continuous multi-million dollar research and product development program scores again with Alkane '56, embodying still further improvements in the leading detergent raw material. Better than ever Alkane '56 may be sulfonated by any conventional method—products derived from it have an even lighter color, less odor—with a very minimum oil content.

If you are considering sulfonation, it will pay you to check with Oronite. We have the experience, plus engineering and manufacturing specialists to accurately estimate your complete needs for sulfonation. Plant designs, equipment needs and prices, performance data, yields—everything you need to know.

Whether you require the top quality detergent raw material or help on sulfonation processes, contact the Oronite office nearest you. Our wide experience is at your disposal.

Other Oronite Detergent Products

Detergent Slurry
Detergent D-40
Detergent D-60
Dispersant NI-W
Dispersant NI-O
Dispersant NI-E
Wetting Agent "S"

ORONITE CHEMICAL COMPANY

EXECUTIVE OFFICES: 200 Bush Street, San Francisco 20, California

SALES OFFICES

450 Mission Street, San Francisco 5, Calif. — 714 W. Olympic Blvd., Los Angeles 15, Calif.
30 Rockefeller Plaza, New York 20, N. Y. — 20 North Wacker Drive, Chicago 6, Illinois
Carew Tower, Cincinnati 2, Ohio — Mercantile Securities Bldg., Dallas 1, Texas
36 Avenue William-Favre, Geneva, Switzerland

ORONITE CHEMICAL COMPANY

m-Aminophenol, dist., dms., ton lots lb. 2.05 - —
smaller lots lb. 2.50 - —
p-Aminophenol, dms., frt. alld lb. 1.15 - —
Aminophylline, USP, 100-lb. dms. lb 3.55 - —
Ammonia anhyd. fertilizer, tanks, works, frt. equald ton 85.00 - —
refrigeration, tanks works, frt equald ton 87.50 - —
aqueous (29.4% NH_3), dms., c.l., dlvd Metropolitan area 100 lbs .460 - —
t.c.l., works 100 lbs 4.00 - —
tanks, works, anhyd basis ton 88.00 —

Ammoniacal liquor (see Ammonia, aqueous).

Ammoniac, sal, gray, bgs., c.l., works, frt equald 100 lbs 8.25 —
t.c.l., same basis 100 lbs. 8.65 - 11.15
white gran. (see Ammonium chloride, tech.).

Ammonium acetate, purif., dms lb. .38 - —
Benzoate USP dms., kgs. 4,000-lb. lots frt. alld lb. .80 —
smaller lots, frt. alld lb. .81 - 1.08
Biborate gran., dms. c.l., works, ton 319.50 - —
ton lots, ex whse ton 395.00 - —
smaller lots, ex whse ton 400.00 —
Bicarbonate dom., dms., c.l., works, 100 lbs. 6.50 - —
t.c.l., works 100 lbs 8.00 - —
imp., dms t.c.l. lb .07¼ - .08½
Bichromate, dms., works lb. .42 - .43
Bifluoride, dms., dlvd lb. .2145 - .2245
Bromide, NF, gran., bbls lb. .40 - —
Powdered ammonium bromide 10c per lb. higher.
Carbonate, USP, lump, dms lb. .16 - —
Chloride, tech., white, gran., fines, bgs., c.l., works 100 lbs. 5.25 - —
t.c.l., works 100 lbs. 7.00 - —
USP, gran., bbls., dms lb. .17¼ - —
Citrate, dibasic, bbls lb. .77 - —
Dichromate (see Ammonium bichromate).
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia aqueous).
Hypophosphite, NF, dms lb 3.07 - —
Iodide, NF, dms., bots lb. 4.26 - 4.38
Linoleate, 80%, dms., works lb. .50 - .55
Nitrate dom. fertilizer grade, 33.5% N., bgs., western works frt equald ton 68.00 - —
with dolomite, 20.5%N bgs., Hopewell, Va ton 51.00 - —
imp., Canadian, 33.5% N, eastern bgs., c.l., ship't point, frt. equald to $8 per ton ton 70.00 - —
western, bgs., c.l., f.o.b. cars, Los Angeles ton 79.76 - —
Oxalate, fine gran., dms lb .26½ - .31
Pentaborate, gran., bgs., c.l., works ton 187.50 - —
ton lots, ex whse ton 271.50 - —
smaller lots, ex whse ton 276.50 - —
Ammonium pentaborate powder $10 per ton higher.
Persulfate, kgs lb. .38 - .47½
Phosphate coml. bgs. c.l., works, frt. equald lb. .09 - —
t.c.l., same basis lb. .0935 - —
dibasic, NF, V bbls., dms. lb. .46 - —
tech., bgs., c.l., works, frt. equald lb. .09 - —
t.c.l., same basis lb. .0935 - —
Salicylate, NF, dms., kgs lb 1.62 - 1.64
Silicofluoride, dms., works lb. .11¾ - .13¼
Sulfamate, bgs., c.l., t.l., works, lb. .18 - —
t.c.l., works lb. .22 - —
Sulfate coke-oven bulk producing ovens, base price ton 42.00 - 45.00
syn., bulk, c.l., works ton 42.00 - 46.00
purif., dms., works lb. .09 - .09½
Sulfide, liq., 40-44%, tanks, frt. equald., 100% basis ton 160.00 - —
Sulfocyanide, tech (see Ammonium thiocyanate)
Thiocyanate, tech., dms., c.l., works lb .20 - —
t.c.l. works lb .22 - .28
Thioglycollate, coml., cbys., 100% basis lb. 1.35 - 1.55
highly purif. cbys. 100% basis, lb 1.70 - 1.96
Thiosulfate cryst. photo grade, fib. dms., frt. alld lb. .65 - —
60% soln. dms. c.l. works lb. .06½ - —
d-Amphetamine hydrochloride dibasic, bots lb. 28.00 - —
dl, dms lb. 6.00 - —
d-monobasic, bots lb. 28.00 - —
d-Phosphate, dibasic bots lb 28.00 - —
dl, dms lb 6.00 - —
d-Sulfate, dms lb. 28.00 - —
dl, dms lb. 6.00 - —
Amyl acetate, ex fusel oil, tech., dms., c.l. frt alld. E of Rockies lb .22 - —
t.c.l., same basis lb. .23 - —
tanks, same basis lb. .20 - —
syn., oxo process, dms., c.l., dlvd lb. .19¼ - —
t.c.l., dlvd lb. .20¼ - —
tanks, dlvd lb. .17¼ - —
ex pentane, reg., dms., c.l., dlvd lb. .17½ - —
t.c.l., dlvd lb. .18½ - —
tanks, dlvd lb. .15½ - —
tech., dms., c.l., dlvd lb. .15½ - —
t.c.l., dlvd lb. .16½ - —
tanks, dlvd lb. .13½ - —
Alcohol (see Alcohol, amyl).
n-Butyrate, dms lb. .90 - 1.25
Cinnamic, aldehyde, dms lb. 1.75 - 2.20
Nitrite, USP, bots lb. 1.75 - 1.83
Salicylate, cns., dms lb. .74 - 1.05
o-tert-Amyl phenol, dms., c.l., works, lb. .48 - —
t.c.l., works lb. .49 - —
tanks, works lb. .46 - —
p-tert-Amyl phenol dms. c.l. works lb. .25¾ - —
t.c.l., works lb. .26¾ - —
tanks, works lb. .24¾ - —
Anethole, NF, cns., dms lb 1.85 - —
tech., dms lb. 1.10 - 1.15
Angelica root, dom. bls lb. .60 .70
Aniline oil, dms., c.l., frt. alld lb. .21 - —
t.c.l., frt. alld lb. .22 - —
tanks, frt. alld lb. .20 - —
tankwagons, min. 2,000 gals. lb. .20½ - —
Salt, dms., c.l., truckloads, 20,000 lbs., min., frt. alld lb. .31 - —
t.c.l., same basis lb. .33 - —
Anise seed, Mexican, bgs lb. No prices.
Spanish, bgs. lb. .31 - —
Anisic aldehyde, bots., dms lb. 1.80 - 2.70
o-Anisidine, dms., frt. alld lb. .88 - —
p-Anisidine, dms., works lb. .97 - —
Annatto seed, whole, bgs lb. .15 - .17
Anthracene, 90-95% bbls., ton-lots, works lb. .83 - —
smaller lots, works lb. .95 - —

Anthraquinone, 99.5% bbls. c.l., frt. alld lb. .83 - —
t.c.l., same basis lb. .86 - —
electrical grade bbls., t.c.l., same basis lb. .91 - —
Antimony butter (see Antimony trichloride)
Metal, bulk, c.l., mines lb. .33 - —
cs., c.l., mines lb. .33½ - —
Oxide, bgs., c.l., frt. alld lb. .29 - —
t.c.l. frt alld lb. .30½ - —
Sulfide, approx. 65%, bgs., dlvd lb. .23 - .26
Trichloride, anhyd., solid, pails, c.l., works lb .41 - —
t.c.l., works lb .43 - —
Antimony-potassium tartrate, tech., powd., dms lb. .65½ - .70½
USP, powd., dms lb. .70½ - .71½
Antipyrine, NF, 200-lb bbls lb. 3.50 —
Apomorphine hydrochloride, USP, bots oz. 23.40 - 23.90
Areca nuts, powd., bbls lb 15 16
Arecoline hydrobromide, NF, bots., tins oz 4.50 6.00
l-Arginine monohydrochloride, dms., 1 kilo lots kilo. 74.80 - —
Arnica flowers (true montana), bls. lb. No prices.
Arsenic metal, lump, bbls. ex whse. lb. .54 - —
Trioxide, USP, dms lb. .48 - —
White, powd., bbls., c.l., dlvd lb. .05½ - —
t.c.l., dlvd lb. .06½ - .07½
Asafetida, cs lb. .36 - .39
powd., bbls., dms lb. .50 53
Asbestine (see Talc, fibrous, N. Y.)
Asbestos, Canadian, crude, No. 1, c.l. (20 tons), mines ton 1,430.00 - —
No. 2, c.l. (20 tons), mines ton 742.50 - —
Run of-mine, c.l. (20 tons) mines ton 611.60 - —
3K, c.l. (20 tons), mines ton 479.60 - —
2R, c.l., (20 tons), mines ton 408.10 - —
3T, c.l. (20 tons), mines ton 382.80 - —
3Z, c.l. (20 tons), mines ton 353.10 - —
4K, c.l. (20 tons), mines ton 190.30 - —
4M, c.l. (20 tons), mines ton 190.30 - —
4T, c.l. (20 tons), mines ton 171.60 - —
4Z, c.l. (20 tons), mines ton 171.60 - —
5D, c.l (20 tons), mines ton 134.75 - —
5K, c.l. (20 tons), mines ton 134.75 - —
5M, c.l. (20 tons), mines ton 122.35 - —
5R, c.l. (20 tons), mines ton 115.50 - —
(20 tons), mines ton 115.50 - —
6D, c.l. (20 tons), mines ton 81.90 - —
7D, c.l. (20 tons), mines ton 71.92 - —
7F, c.l. (20 tons), mines ton 68.25 - —
7H, c.l. (30 tons), mines ton 57.75 - —
7K, c.l. (20 tons), mines ton 48.30 - —
7M, c.l. (30 tons), mines ton 42.00 - —
7R, c.l. (20 tons), mines ton 40.95 - —
7RF, c.l. (30 tons), mines ton 42.00 - —
7T, c.l. (30 tons), mines ton 38.85 - —
7TF, c.l. (30 tons), mines ton 42.00 - —
8S, c.l. (30 tons), mines ton 28.35 - —
Asbestos c.l. prices are in U. S. funds, t.c.l. lots $4 per ton higher.
Asphalt, gilsonite, black jet, bgs., c.l., mines ton 37.00 - —
select, 350° F. fusing pt., bgs., c.l., mines ton 38.00 - —
270°-295°F., fusing pt., bgs., c.l., mines ton 37.00 - —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton 32.00 - —
Manjak, No. 10, crude, dms., works lb. .06¼ - —
Petroleum, cut-back, tanks, tankwagon, refy gal. .09 - —
emulsion, tanks, tankwagon, refy. .09½ - —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton 21.00 - —
85-300 penetration, tanks, tank wagon, refy ton 20.00 - —
Aspirin, (see Acid acetylsalicylic).
Atropine, USP, bots oz. 3.90 - —
Sulfate, USP, bots oz. 2.45 - 2.65

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .70 - —
less than 1,000,000,000 units, 50,000 units. .75 - —
Balm of Gilead buds, dried, bgs lb. 1.35 - 1.45
Barberry root bark, bgs lb. .28 .30
Barbital, USP, 100-lb. dms lb. 4.50 - —
Sodium, USP, dms lb. 4.75 - 4.77
Barium carbonate, precip., bgs., c.l., works ton 100.00 - —
smaller lots, works ton 110.00 - —
Chlorate, kgs., works lb. .32 - .36
Chloride annyd., bgs., c.l., works, ton 165.00 - —
t.c.l., works ton 175.00 - —
NF, cryst., dms lb. .20 - —
tech., cryst., dms., c.l., works, 100 lbs. 6.50 - —
t.c.l., works 100 lbs. 7.00 - —
Chromate, bgs., frt. equald lb. .35 - —
Dioxide (see Barium peroxide).
Hydrate, cryst., bgs., c.l., t.l., frt. equald ton 200.00 - —
t.c.l., t.l., frt. equald ton 210.00 - —
Monoxide (see Oxide).
Nitrate, bbls., c.l., t.l., dlvd lb. .16 - —
t.c.l., t.l.l. dlvd lb. .17 - —
Oxide, grd., dms., c.l., t.l., frt. equald ton 275.00 - —
t.c.l., t.t.l., frt. equald ton 285.00 - —
Peroxide, dms., frt. equald lb. .20 - —
Stearate, ctns., c.l., frt. alld lb. .39 - —
t.c.l., same basis lb. .40 - .44
Sulfate, tech. (see Barytes and blanc fixe),
X-ray dms lb. .15 - .15½
Sulfide, dms., c.l., works ton 85.00 - —
t.c.l. works ton 95.00 - —
Barytes, Southern, off-color, bgs., mines ton 25.00 - —
95-75% bgs. mines ton 25.00 - —
water-grd., paper bgs., c.l., E. St. Louis ton 45.00 - —
ex-whse. N. Y. ton 65.10 - —
Bauxite, bulk mines ton 6.75 - 10.00
Bay leaves (see Laurel leaves).
Belladonna leaf, bls lb. .35 - .37
root, bls lb. .45 - .50
Bentonite, dom., 200 mesh, bgs., c.l., mines ton 14.00 - —
imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton 80.60 - —
1 ton lots, ex whse ton 83.10 - —
tow gel., bgs., 5-ton lots, ex whse ton 78.95 - —
1-ton lots, ex whse ton 81.45 - —
Benzal chloride, cbys. works lb. .22 - .23½
Benzaldehyde, NF, dms lb. .74 - 1.05
tech., cbys., t.l., dms lb. .43 - —
smaller lots lb. .44 - —
Benzene (See Benzol).
Hexachloride, 25% and 99% gamma isomer (see Lindane).
tech., high gamma, dms., c.l., dlvd., gamma unit-lb. .0075 —
t.c.l., works, gamma unit-lb. .009 - —
low gamma, dms., c.l., dlvd., gamma unit-lb. .007 - —
t.c.l., works, gamma unit-lb. .0085 - —

Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.03 - —
t.c.l., same basis lb. 1.05 - —
Sulfate, tech., frt. alld, 100% basis lb. 1.05 - —
Benzocaine, dms. lb. 3.48 - 3.50
Benzol, coaltar, pure or nitration, tanks, works:—
Bethlehem, Pa. gal. .36 - —
Birmingham district gal. .36 - —
Chicago district gal. .36 - —
Cleveland district gal. .36 - —
Geneva, Utah gal. .36 - —
Johnstown, Pa. gal. .36 - —
Lackawanna, N. Y. gal. .36 - —
Lone Star, Texas gal. .36 - —
Lorain, Ohio gal. .36 - —
Middletown, Ohio gal. .36 - —
Minnequa, Colo gal. .36 - —
Philadelphia district gal. .36 - —
Pittsburgh district gal. .36 - —
Sparrows Point, Md. gal. .36 - —
Syracuse, N. Y. gal. .36 - —
Terre Haute, Ind. gal. .36 - —
Youngstown, Ohio gal. .36 - —
Benzophenone, dms. lb. 1.40 - 1.70
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald lb. .18 - —
smaller lots, frt. equald lb. .20 - —
Benzoyl chloride, cbys., dms., c.l., works frt equald lb. .22 - —
t.c.l., same basis lb. .23 - —
tank trucks, dlvd Metropolitan area lb. .21 - —
Peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c. cns. dms lb. .62 - 1.04
Alcohol (see Alcohol, benzyl).
Benzoate, USP, f.f.c. cns. dms. lb. .62 - 1.10
Chloride, tech., 13-gal. cbys., dms. c.l., works, frt. equald, lb. .23 - —
t.c.l., same basis lb. .24 - —
tank trucks, same basis lb. .21 - —
A 2½c differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices were ½c. lower.
Cinnamate, cns. lb. 3.60 - 3.90
Formate, cns. lb. 1.30 - 2.10
Isoeugenol, cns. lb 8.60 - 9.10
Propionate, bots. lb 1.35 - 1.65
Salicylate, bots lb. 1.50 - 1.85
Benzylidine acetone, bots lb. 1.68 - 1.80
Chloride (see Benzal chloride).
Berberine bisulfate, cns lb. 35.00 - 36.25
Hydrochloride, bots lb. 35.00 - 36.25
Betagamma-picoline (see b,g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, technical)
Biotin, cryst., bots gram 10.00 - —
Biphenyl (see Diphenyl).
Bismuth chloride, cars lb. 5.11 - —
Hydroxide, dms lb. 4.65 - —
Metal, bxs. ton lots lb. 2.25 - —
Nitrate, cryst., dms lb. 2.10 - 2.17
Oxide, anhyd., dms lb. 4.47 - 5.05
Oxychloride, dms lb. 4.37 - 4.42
Phenolsulfonate, fib. dms lb. 5.22 - —
Subcarbonate, USP, dms lb. 3.20 - —
Subgallate, NF, fib. dms lb. 3.15 - —
Subiodide, fib. dms lb. 5.37 - —
Subnitrate, NF, dms lb. 2.65 - —
Subsalicylate, USP, dms lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd. jars lb. 4.22 - —
Black, acetylene, imp., bgs., c.l., duty and freight extra lb. .17 - —
cs., t.c.l., ex whse lb. .22½ - .26
Ash (see Barium sulfide)
Bone, dms., t.c.l., frt. alld lb. .17 - .23¼
Pacific coast bone black prices 2c. per lb. higher.
Carbon, channel, pigment, high color, beads, ctns., c.l., works, lb. .72 - —
t.c.l., dlvd or whse. lb. .78 - —
medium color, uncompressed, bgs. c.l., works, lb. .12 - —
t.c.l. dlvd or whse, lb. .19 - —
rubber, beads, bulk, c.l., works lb. .07 - —
bgs., c.l., works lb. .074 - —
t.c.l., works lb. .1225 - —
furnace, fast extruding, bgs., c.l., works lb. .06 - —
ctns., t.c.l. whse lb. .10 - —
high abrasion, bulk, c.l., works, lb. .0750 - —
bgs., c.l., works lb. .0790 - —
t.c.l., dlvd. or whse lb. .122 - .125
high modulus, bgs., c.l., works, lb. .0550 - —
ctns., t.c.l. whse lb. .0950 - —
semi-reinforcing bgs., c.l., works lb. .045 - —
bgs., ctns., t.c.l., whse lb. .085 - —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure, bgs., c.l., works, lb. .13¼ - —
t.c.l., works lb. .13½ - —
Lamp, bgs., c.l., works lb. .16 - .45
Mineral, bgs. works lb. .0160 - .0675
Blackberry root bark, bls lb. .45 - —
Black haw root bark, bls lb. .63 - .65
tree bark, bls lb. .40 - .45
Blanc fixe, dry, byproduct, bgs., c.l., works ton 190.00 - —
t.c.l., works ton 200.00 - —
direct process, bgs., c.l., works, ton 110.00 - —
t.c.l., works ton 120.00 - —
N. Y. whse ton 155.00 - —
Blood, dried, 16-16½% ammonia, bgs unit-ton 4.75 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago, unit-ton 5.00 - —
soluble, bgs., c.l. lb. .13 - .15
t.c.l. lb. .15½ - .19½
Bloodroot, bls lb. .48 - .50
Blue, alkali, dry, 250-lb. bbls., dlvd., N. of Tenn. and N. C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 2.10 - —
toner, 125-lb. bbls., litho flushed, same basis lb. 1.20 - —
Chinese, bbls., same basis, carlots, lb. .50 - —
t.c.l., ton lots lb. .51 - —
less than ton lots lb. .52 - —
Cobalt, genuine, bbls., same basis lb. 4.90 - —
Imitation (see Blue, ultramarine).
Dyes (see Dyes).
Iron (see Blue, Chinese Milori, Potash, Prussian and Soda).
Methyl, violet toner, molybdated, PMA, bbls., same basis lb. 2.75 - —
tungstated, PTMA, bbls., same basis lb. 4.00 - 4.15
Milori, bbls., same basis, carlots, t.c.l., ton lots lb. .51 - —
less than ton lots lb. .52 - —
Peacock, fugitive, 100% color strength, bbls., same basis, lb. .85 - —

Blue, phthalocyanine, full strength, bbls., same basis lb. 3.45 - —
resinated, bbls., same basis lb. 3.00 - —
water dispersable, bbls., same basis lb. 1.54 - —
Potash, CP, bbls., same basis lb. .56 - —
Prussian, insoluble, soluble, bbls., same basis, carlots lb. .50 - —
t.c.l., ton lots lb. .51 - —
less than ton lots lb. .52 - —
Soda, CP, bronze, bbls., same basis, carlots lb. .50 - —
t.c.l., ton lots lb. .51 - —
less than ton lots lb. .52 - —
Ultramarine, cobalt type, dry or pulp, bbls., same basis lb. .30½ - .35
jobbing types, bbls., same basis, lb. .19 - —
regular types, dry, bbls., same basis lb. .22½ - .35
Victoria toner, molybdated, PMA, bbls lb. 4.10 - —
tungstated, PTMA, bbls lb. 5.35 - —
Blue dry colors, dlvd prices ½c higher Ala., Fla., Ga. La. (Shreveport 1¼c.), Miss. N. C. S. C. Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c higher Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago
Vitriol (see Copper sulfate).
Bluestone (see Copper sulfate).
Bonemeal, steamed, works, E ton 65.00 - —
Los Angeles ton 82.00 - —
Bone phosphate defluorinated (see D) of lime (see Calcium phosphate, tribasic).
precipitated (see Calcium phosphate tribasic, NF, precip.)
Borax, tech., anhyd., 99½%, bgs., c.l., works ton 80.50 - —
ton lots, ex whse., N. Y. or Chicago ton 130.25 - —
bulk, c.l., works ton 71.50 - —
cryst., 99½%, bgs., c.l., works, ton 69.25 - —
ton lots, ex-whse., N. Y. or Chi ton 119.00 - —
smaller lots, same basis, ton 124.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton 43.25 - —
ton lots, ex whse., N. Y., Chi ton 93.00 - —
smaller lots, same basis, ton 98.00 - —
bulk, c.l., works ton 36.75 - —
pentahydrate, 99½%, bgs., c.l., works ton 57.75 - —
ton lots, ex whse., N.Y., Chi ton 107.50 - —
smaller lots, same basis, ton 112.50 - —
bulk, c.l., works ton 51.50 - —
powd., 99½%, bgs., c.l., works, ton 48.25 - —
ton lots, ex-whse., N. Y. or Chi ton 98.00 - —
smaller lots, same basis, ton 103.00 - —
Borax packed in kgs., $45.50 per ton higher than in paper bgs.; in barrels, $24.50 higher. USP borax $15 per ton higher.
Bordeaux mixture, bgs., c.l., works, frt alld or nearest whse. pt lb. .18 - .24
t.c.l., same basis lb. .19 - .26
Borneol, cns lb. 2.50 - 4.50
Boron trifluoride gas, cyls., truckload works lb. .62 - —
t.t.l. works lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
t.c.l. same basis lb. .33 - .38
ret. dms., c.l., t.l. dlvd. E. of Rockies lb. .30 - —
t.c.l. same basis lb. .30 - .32
tanks, same basis lb. .21½ - —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
t.c.l., same basis lb. .50 - —
Bromoform, pharmaceutical grade, bots lb. 1.62 - 2.60
cbys. lb. 1.52 - —
Bromstyrol, bots lb. 5.40 - 5.70
Bronze powder aluminum (See A).
Brown, iron oxide, pure, bgs., c.l., works lb. .14¼ - —
t.c.l., works lb. .14½ - —
Oxide, metallic, bgs., works lb. .04 - —
Sienna, burnt., paper bgs., c.l., works lb. .06¼ - .17¼
t.c.l., works lb. .06½ - .17½
raw, paper bgs., c.l., works lb. .06¼ - .16¼
t.c.l., works lb. .06½ - .16½
Umber, burnt, American, c.l., works lb. .07 - .07¾
t.c.l., works lb. .07¼ - .08
Turkey type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .07¾ -
raw, American, bgs., works lb. .07½ - .08¼
Turkey-type, bgs., works lb. .06¾ - .07
Vandyke, bbls., works lb. .09½ - .12
Brucine, cns., 100-oz. lots oz. .20 - .25
Sulfate, NF cns., 100-oz. lots oz. .15 - .20
Buchu leaves, bls lb. .95 - —
Butadiene, refd., cyls., c.l. refy lb. .21 - —
t.c.l., refy. lb. .22 - —
tanks, refy lb. .15 - —
Butane, indust., tanks, group 3 gal. .04½ - —
N. Y. harbor gal. .08 - —
n-Butyl acetate, ferment., dms., c.l., frt. alld lb. .15½ - —
t.c.l., same basis lb. .16½ - —
tanks, same basis lb. .13½ - —
syn., dms., c.l., dlvd E lb. .15½ - —
t.c.l., same basis lb. .16½ - —
tanks, same basis lb. .13½ - —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .13 - —
t.c.l., same basis lb. .13¾ - —
tanks, same basis lb. .11¼ - —
Butyl alcohol (see Alcohol, n-Butyl).
Aldehyde (see Butyraldehyde).
Chloride, dms., c.l., works lb. .37½ - —
t.c.l. works lb. .38 - —
Ether, dms., c.l., works lb. .32¾ - —
t.c.l., works lb. .33¼ - —
tanks, works lb. .31 - —
Lactate, dms., c.l., frt. alld E. of Rockies lb. .42 - —
t.c.l. same basis lb. .43 - —
tanks, same basis lb. .40 - —
Laurate, dms., works lb. .39 - —
Methacrylate, dms., c.l., t.l., works, lb. .70 - —
t.c.l., works lb. .55½ - —
Oleate, refd., dms., t.c.l., works lb. .32 - —
Phenylacetate, dms. lb. 4.50 - 4.60
Phthalate (see Dibutyl phthalate).
Stearate, dms., c.l., frt. equald, lb. .24½ - —
t.c.l., same basis lb. .25½ - —
Butylamine (see mono-, di-, and tri-).
6-tert-Butyl-m-cresol, dms., c.l., works lb. .55 - —
t.c.l., works lb. .56 - —
tanks, works lb. .54 - —
p-tert-Butylphenol, bgs., c.l., works, lb. .25½ - —
Butyraldehyde, dms., c.l., dlvd lb. .21½ - —
t.c.l. dlvd lb. .22½ - —
tanks, dlvd lb. .19½ - —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).			
Cadmium iodide, 25-lb. fib. dms.	lb.	6.75	7.00
Metal ingots or sticks, cs., dlvd.	lb.	1.70	—
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more	lb.	3.00	—
hydrous, dms., 100-lb. lots or more	lb.	2.80	—
syn., cryst., anhyd., dms., 100-lb. lots or more	lb.	3.00	—
hydrous, 100-lb. lots or more	lb.	2.80	—
Citrated, USP, dms., 100-lb. lots or more	lb.	2.70	—
Calamine, USP, dms	lb.	.34	—
Calciferol, cryst., vials, 1-kilo lots, works	gram.	.60	—
25 to 100 gram lots, works	gram.	.65	—
in edible oil (see Viosterol).			
Calcium p-aminosalicylate, fib., dms., 1,000 lb. lots, frt. adjusted	lb.	7.00	—
smaller lots same basis	lb.	7.05	7.50
Arsenate, dealers, bgs., c.l., frt. alld	lb.	.09	.09½
l.c.l., same basis	lb.	.10	.10½
Bromide, NF, jars	lb.	.94	.98
Carbide standard generator size, dms., c.l., dlvd	ton.	134.40	—
Carbonate, nat., dry-grd., precip., floated., 325 mesh, bgs., c.l., works	ton.	10.50	—
chalk whiting 325 mesh, bgs. works	ton.	32.00	34.00
water-grd., ½ to 10 microns, bgs., c.l., works	ton.	30.00	—
10 to 20 microns, bgs., c.l., works	ton.	17.00	18.00
precip., dense, bgs., c.l., works	ton.	32.50	—
l.c.l., works	ton.	42.50	—
medium, bgs., c.l., works	ton.	38.00	—
l.c.l., works	ton.	48.00	—
surface treated, bgs., c.l., works	ton.	37.50	—
l.c.l., works	ton.	47.50	—
ultrafine, bgs., c.l., works	ton.	110.00	160.00
l.c.l., works	ton.	120.00	175.00
Chloride, cryst., purif., dms	lb.	.27	—
flake, 77-80%, paper bgs., c.l., works, frt. equald	ton.	29.00	—
liquor, 40%, tanks, frt. equald.	ton.	12.35	—
pellets bgs., c.l., works	ton.	35.40	—
powd., bgs., c.l., works	ton.	37.65	—
solid, 73-75%, dms., c.l., frt. equald	ton.	27.50	—
l.c.l., works, same basis.	ton.	34.00	71.00
USP, gran., dms.	lb.	.32	—
Chromate bgs., frt. equald	lb.	29½	.30
Cyanide, dms., dlvd E of Rockies	lb.	.24	.50
Cyclamate, 100-lb. fib. dms.	lb.	2.95	—
Gluconate, AA, bbls., dms.	lb.	.74	.76
USP, bbls., dms	lb.	.67	.69
Hydride, dms., works	lb.	2.15	3.00
Hypochlorite, high test, 45-lb. cs., dlvd. E. of Rockies	cs.	22.60	24.75
100-lb. dms., same basis	dm.	28.65	32.50
Hypophosphite, dms., ton lots or less	lb.	.90	.93
Iodide, jars	lb.	4.52	—
Lactate NF, dms., 10,000-lb. lots or more, works	lb.	.36	.40
smaller lots, works	lb.	.41	.48
Mandelate, USP, dms., works	lb.	2.10	2.25
Naphthenate liq., 4% Ca., dms., frt. equald	lb.	.27¼	—
Nitrate, fertilizer grade, bgs., c.l., Los Angeles	ton.	46.00	—
tech., dms., works	lb.	.13	—
Pantothenate, jars, 100-gram lots or more, frt. adjusted	gram.	.06	—
Para-aminosalicylate (see Calcium p-Aminosalicylate).			
Phenolsulfonate, dms	lb.	.70	—
Phosphate, dibasic, USP, bgs., c.l., frt. equald 100 lbs.		7.75	—
l.c.l., frt. equald 100 lbs.		8.50	—
feed grade, 18½%P, bgs., c.l., t.l., frt. equald	ton.	74.00	83.25
l.c.l., frt. equald	ton.	79.00	93.25
21% P, bgs., c.l., t.l., frt. equald	ton.	94.50	—
l.c.l., frt. equald	ton.	99.50	104.50
monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs.		6.90	—
smaller lots, same basis, 100 lbs.		7.40	—
tribasic, NF, precip., bgs., c.l., frt equald 100 lbs.		8.25	—
l.c.l., frt. equald 100 lbs.		9.00	—
Phytate, bgs., works	lb.	.50	—
Resinate, precip., dms., frt. alld., works	lb.	.30½	—
Silicate, hydrated, bgs., c.l., works.	lb.	.06	—
l.c.l., works	lb.	06½	—
paint grade (see Wollastonite).			
Stearate, ctns., c.l.	lb.	.37	—
l.c.l.	lb.	.38	.42
Sulfate (see Gypsum).			
Calomel, USP, powd., dms	lb.	3.42	—
Camphene 46° m.p., dms., incl., c.l., works	lb.	.15	—
l.c.l., same basis	lb.	.16½	—
tanks, same basis	lb.	.12½	—
Chlorinated, 67-69% (see Toxaphene).			
Camphor, monobromated, NF, dms.,	kgs	lb.	3.25	3.67
nat. USP powd., cs., 100-lb. lots.	lb.	.85	—
tablets, 1-oz., ½-oz. cs.	lb.	.85	—
syn., tech., 1 bbl. or more	lb.	.52	—
USP, gran., powd., bbls., 2,000-lb. lots	lb.	.59	—
1,000-lb. lots	lb.	.60	—
smaller lots	lb.	.61	—
tablets, tins, 2,000-lb. lots	lb.	.90	—
1,000-lb. lots	lb.	.91	—
smaller lots	lb.	.92	—
Canada balsam (see Fir balsam).			
Cantharides, Chinese, cs.	lb.	2.00	2.03
powd., bxs	lb.	2.25	2.30
Russian, bgs.	lb.	4.00	4.05
powd., bxs	lb.	4.35	4.40
Capsicum (see Pepper red).			
Oleoresin, NF, from domestic pepper, dms	lb.	4.50	5.25
from African pepper, dms.	lb.	4.35	5.00
Caraway seed, Dutch, bgs.	lb.	.16½	.17
Carbazole, 97%, bbls., ton lots, works	lb.	1.05	—
Carbon dioxide, indust., wholesale, bulk, dlvd. metropolitan area.	ton.	73.00	115.00
cyls., same basis	lb.	.08	—
solid, same basis	lb.	.035	.040
Disulfide, 55-gal. dms., c.l., works, frt. equald. to competitive points	lb.	.07	—
l.c.l., same basis	lb.	.08½	.09
5-gal. dms., 30 dms. to c.l., same basis	lb.	.13	—
less than 30 dms	lb.	.16	—
tanks, dlvd.	lb.	.025	.0545
Tetrachloride, CP, consumers, dms., c.l., l.c.l., frt. alld.	lb.	.11½	.13¾
Carbon tetrachloride, tech., consumers, dms., c.l., E. of Rockies, frt. alld	lb.	.10½	—
W. of Rockies, f.o.b. stockpoints	lb.	.11	—
l.c.l., E. of Rockies, frt. alld	lb.	.12¾	—
W. of Rockies, f.o.b. stockpoints	lb.	.13¼	—
tanks, E. of Rockies, frt. alld	lb.	.09½	—
W of Rockies, f.o.b. stockpoints	lb.	.10	—
Carboxymethyl cellulose (see CMC).			
Carbromal, NF, dms., 100-lb. lots, works	lb.	4.00	4.25
smaller lots, works	lb.	4.10	4.75
Cardamom seed, bleached, "A"	lb.	3.25	—
"B"	lb.	3.10	—
decorticated, Ceylon, cs.	lb.	1.95	—
Guatemalan, cs	lb.	2.95	—
green, Ceylon, bgs	lb.	2.10	2.15
Carmine, No. 40, NF, bulk, 100-lb. lots or more, dlvd	lb.	14.40	—
smaller lots, dlvd	lb.	14.50	15.20
Carotene, tech., 1,350,000 A units per gram, tins, 5-10 kilo lots, dlvd gram.		.38	—
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works, million units.		.12	—
Microcrystalline in oil, 400,000 A units per gram, dms., dlvd, million units.		.26	—
b-Carotene, pure, crystalline, 1,600,000 A units to 1,670,000 per gram., cns	gram.	.35	—
in vegetable oil, 400,000 A units per gram, cns. gram.		.084	—
Carvol, bots	lb.	4.50	8.00
Cascara sagrada bark, bulk	lb.	.30	.31
Casein, dom., acid precip., standard, bgs., 10,000-lb. lots or more, shipt. point	lb.	.32	.35
premium, bgs., 10,000-lb. lots or more, shipt. point	lb.	.38	.40
Imp., Argentine, acid-precip., grd., bgs., c.l., duty paid	lb.	.26½	.27½
New Zealand, same basis	lb.	.30	—
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J	lb.	.22	—
ton lots, same basis	lb.	.23	—
dm. lots, same basis	lb.	.25	—
Cassia, Batavia, cuttings, bls	lb.	.18	—
longstick, cracked, bls	lb.	.20	—
shortstick, cracked, bls	lb.	.19	—
Corinje, bls.	lb.	.21	—
Castor beans, bgs., f.o.b. Brazil	ton.	125.00	Nom.
Oil (see Oil, castor).			
Pomace, bgs., c.l., works	ton.	40.00	—
Castoreum, nat., cns	lb	5.00	30.00
syn., cns	lb	9.00	—
Catechol, CP, cryst., fib. dms., works	lb	2.17½	—
resub., dms., works	lb.	4.29½	—
Catnip leaves, Southern, bls	lb.	75	—
Celery seed, French, bgs	lb.	.29	.29½
Alleppey, bgs.	lb.	2.15	2.20
Indian, bgs.	lb.	.17	.17½
Cellulose acetate, flake, powd., ctns., bgs., 100-lb. lots or more, dlvd E	lb.	.35	.46
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs. dlvd E.	lb.	.545	.553
27% butyryl content, bgs., dlvd. E	lb.	.595	.605
38% butyryl content, bgs., dlvd. E	lb.	.545	.555
50% butyryl content, bgs., dlvd E	lb.	.585	.593
half-second, bgs., dlvd E.	lb	.545	.555
Scrap (see Pyroxylin scrap).			
Cerium chloride, dms., dlvd.	lb.	.35	—
Hydrate 74% CeO_2, fib. dms., 100-lb lots or more	lb.	1.44	—
77% CeO_2 fib dms., 100-lb lots or more	lb	1.74	—
Oxalate NF, bbls., bgs., works.	lb.	1.32	—
Oxide, optical grade, bgs., 50-lb. lots or more, dlvd	lb.	1.85	1.98
smaller lots, dlvd	lb	2.03	2.23
Chalk (see Calcium carbonate).			
Chamomile flowers Hungarian style,	cs	lb	.85	—
Roman, cs	lb	1.50	—
Charcoal, activated NF, fib dms., c.l., works	lb	.25	.32
5-ton lots, works	lb.	.26½	.32½
smaller lots works	lb.	.27	50
Bone (see Black, bone).			
Hardwood, briquets, bulk, c.l., f.o.b. plant	ton.	72.00	75.00
40-lb. paper bgs., same basis.	ton.	76.00	—

SPECIAL PROFIT AND SUPPLY ADVANTAGES FOR CHEMICAL PROCESSORS

Michigan Chemical Corporation has twenty years' experience in the research and production of Bromine, Magnesia, Chloride, and Calcium chemicals. This background provides users with a dependable source of quality chemicals made right and priced right; our plants are large enough to provide quantity shipments for practically all purposes. Insure continuity of your operations: order from Michigan Chemical.

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Aluminum Bromide Anhydrous. Technical grade, dark colored product suitable for most manufacturing uses. Highly reactive catalyst, many uses in organic synthesis especially in isomerization, bromination and halogen exchange reactions. Available as solid or lump.

Ammonium Bromide NF IX. A white powder, very pure, complies with all the requirements of the National Formulary. Commonly used as sedative in pharmaceutical preparations. Also in photography, textile finishing and as fire retardant for fabrics.

Bromine, Dry. A powerful oxidizing and brominating agent used in manufacture of dyes, pharmaceuticals. Many applications in organic synthesis. Low moisture content of 30 ppm permits use in nickel and monel equipment. Very irritating to skin, eyes.

Bromodichloromethane. A clear, heavy, volatile liquid with a chloroform-like odor. Specific gravity 1.99; boiling point 90 degrees C. Soluble or miscible with many organic liquids. Used in organic synthesis. Adds to olefins under the influence of peroxide catalysts.

Bromotrichloromethane. A clear, colorless, heavy liquid with a chloroform-like odor. Specific gravity 2.0; boiling point 104 degrees C. Miscible with many organic liquids. Useful in organic synthesis, forming adducts with olefins with peroxide catalysts.

Chlorobromomethane "CB". A specially prepared pure, non-corrosive fire extinguishing fluid. Now finding increased use in factories, warehouses, homes. Clear, colorless, 2 degrees C. boiling range; complies with current military specifications. Used as solvent and in organic synthesis.

Cyclopentyl Bromide. A clear, colorless liquid with an aromatic odor. Specially prepared for use in organic synthesis, particularly for introduction of the cyclopentyl radical. Many potential uses in manufacture of pharmaceuticals. Purified grade, 2 degrees C. boiling range.

Dibromochloromethane. A clear, colorless, heavy liquid similar to bromodichloromethane. Used in organic synthesis, forming adducts with olefins under the influence of peroxide catalysts. Specific gravity 2.38; boiling point 116 degrees C.

β - Diethylaminoethyl Chloride Hydrochloride. $(CH_3CH_2)_2NCH_2CH_2Cl \cdot HCl$ (DEC). A granular solid. Specially suited for use as an intermediate in organic chemical manufacture, including antispasmodic agents and other pharmaceuticals.

β - Dimethylaminoethyl Chloride Hydrochloride. (DMC). $(CH_3)_2NCH_2CH_2Cl \cdot HCl$. A granular solid. Specially prepared for use in manufacture of antihistaminics and other pharmaceuticals. Other potential uses in organic synthesis. Relatively non-toxic in hydrochloride form.

β - Dimethylaminoisopropyl Chloride Hydrochloride. $(CH_3)_2NCH_2CHClCH_3 \cdot HCl$ (DMIC). An organic intermediate similar in appearance and properties to DEC and DMC. Specially prepared for manufacture of analgesics and other pharmaceuticals. Other potential uses in organic synthesis.

γ - Dimethylaminopropyl Chloride Hydrochloride. $(CH_3)_2NCH_2CH_2CH_2Cl \cdot HCl$ (DMPC). A white powder of singular purity. A versatile intermediate for pharmaceutical and organic syntheses, available exclusively from Michigan Chemical.

Ethyl Bromide. A clear, colorless, volatile liquid, specially prepared for use as an intermediate in organic synthesis. Practically free from impurities; has a narrow boiling range. Used in manufacture of dyes, perfumes and pharmaceuticals.

Hydrobromic Acid. A clear, colorless or light amber colored fuming liquid. Used for manufacture of inorganic metal bromides, aliphatic bromides, pharmaceuticals, dyes and intermediates. 48% acid and other strengths.

Magnesium Carbonate, Basic, Technical. Fine, uniform white powder, 325 mesh, bulk density 5.5 pounds per cubic foot. Very reactive. Used for rubber compounding, printing inks, paints, varnishes. Anti-caking agent for table salt; conditioning or bulking material for powder formulations.

Magnesium Hydroxide. Fine, white powder, typical assay 96.3%, low in moisture, iron, alumina, silica. Technical and NF IX grades. Special bulk densities available in NF grade. Convenient material for manufacture of light magnesias, other magnesium compounds.

Magnesium Oxides. Six principal grades of Michigan magnesium oxide with wide range of desirable physical and chemical characteristics covering principal uses of MgO, including rubber compounding, rayon manufacture, ceramics, glass, refractories, insulation.

Methyl Bromide. A heavy, colorless liquid, vaporizing at 40 degrees F., non-flammable and poisonous. Highly penetrating and insecticidally effective fumigant. Also used in organic synthesis for the introduction of the methyl group, especially in preparation of certain pharmaceutical chemicals.

Methylene Bromide. A clear, colorless liquid. Miscible with methyl alcohol, ether, chloroform and other organic liquids. A purified product with a 1.8 degrees C. boiling range. Specific gravity 2.47. Used in organic synthesis, as solvent and heavy gauge liquid.

Monobromobenzene. Clear, colorless, heavy liquid. Specially prepared for use as an intermediate in preparation of organic compounds. For introduction of the phenyl radical and in Grignard-type reactions. A pure material with a 4 degrees C. boiling range, specific gravity 1.495.

Phosphorous Tribromide. Brominating agent. A liquid, boiling point 173 degrees C., which fumes in contact with moist air. Used in synthetic work to convert alcohols to bromides, and acids to acyl bromides. Specially useful in preparation of bromides from alcohols without rearrangement.

Potassium Bromate, Granular. A fine, white, granular or crystalline material 99.5% pure. Decomposes at 370 degrees C. with evolution of oxygen. Strong oxidizing agent, used as an analytical reagent. Neutralizer in permanent wave compounds.

Potassium Bromate, Powder. A fine uniform powder with same properties as Granular. Available with added magnesium carbonate conditioning agent when specified. Suitable for use as an aging additive for flour.

Potassium Bromide, U.S.P. XIV. Pure, white granular powder. Low in chloride, passes all U.S.P. requirements. Widely used in the preparation of photographic emulsions, and in lithography. One of the most important sedatives. Available in several granulations.

Sodium Bromide, U.S.P. XIV. Pure, white crystalline powder or granules. Passes all requirements of the U.S. Pharmacopoeia. High assay; low in chloride. An important nerve sedative. Used in manufacture of other bromides. Contains about 77.5% bromine.

Trimethylene Chlorobromide. Clear, colorless liquid used in manufacture of anesthetic grade cyclopropane. Greater reactivity of bromine atom makes trimethylene chlorobromide specially useful also in preparation of gamma chloro compounds. Boiling range 2 degrees C. maximum.

Zinc Bromide Solution, Optical Grade. Clear, colorless solution, about 80% $ZnBr_2$. Used in laboratories dealing with radioactive chemicals as a radiation viewing shield; the most satisfactory material. Meets all chemical and optical specifications of Argonne National Laboratory.

Also manufacturer of Pestmaster Insecticides, Pestmaster* Methyl Bromide Fumigant and Dustmaster* Road Chemicals.*

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MICHIGAN CHEMICAL CORPORATION

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EASTERN SALES OFFICE: 230 Park Avenue, New York 17, New York

BASIC MANUFACTURER OF INDUSTRIAL, PHARMACEUTICAL AND AGRICULTURAL CHEMICALS

Charcoal, pinewood, gran., bgs., c.l., works, South ..ton 57.00 - —
l.c.l., works, South ton 57.00 -67.00
lump, bgs., c.l., works, South ton 53.50 - —
l.c.l., works, South ton 56.50 -71.00
bulk, c.l., works, South ton 33.00 - —
t.l., works, South ton 41.00 - —
Chestnut extract, liq., 25% tannin, tanks, works lb. .04 - —
powd., 60% tannin, bgs., extra, c.l., works lb. .1032- —
l.c.l., works lb. .1102- —
Chloral, tech., 94% min., dms., c.l., multiple units, 5 cars, works, l.c.l., works lb. .24 - —
tanks, works lb. .21 - —
Hydrate, USP, 40-lb. jars, 1,000-lb. lots lb 1.00 - —
500-lb. lots lb 1.03 - —
)00-lb. lots or less lb 1.05 - —
Chloramine T, NF, bbls., works lb. .75 - 1.00
Chlordan, agricultural, dms., c.s., frt alld lb. .65 - —
l.c.l. 5,000 to 10,000-lb. lots, frt alld lb. .66 - —
clarif., dms., c.l., frt. alld lb. .69 - —
l.c.l. 5,000 to 10,000-lb. lots, frt. alld lb. .70 - —
Chlorinated paraffin, 42%, dms., c.l., frt. alld lb. .16¼- —
l.c.l., same basis lb. .17¼- —
70%, dms., c.l., same basis lb. .18¾- —
l.c.l., same basis lb. .19¾- —
Rubber, 5, 10, 20 cps., ctns., c.l., works lb. .55 - —
l.c.l., works lb. .56 - —
125, 1,000 cps., ctns., c.l., works lb. .65 - —
l.c.l., works lb. .66 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .10¼- —
l.c.l., Metropolitan area lb. .11¾- .13
tanks, single units, works, frt. equald 100 lbs. 3.05 - —
multiple units, 5 cars, works, frt. equald 100 lbs. 3.92 - —
3 cars, same basis 100 lbs. 4.12 - —
2 cars, same basis 100 lbs. 5.12 - —
1 car, same basis 100 lbs. 7.12 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.45 - —
m-Chloroaniline, dms., 1,000 lbs. or over, frt. alld lb. .75 - —
less than 1,000 lbs. same basis lb. .80 - —
o-Chloroaniline, dms., c.l., frt. equald. lb. .70 - —
l.c.l., same basis lb. .72 - —
p-Chloroaniline, dms., c.l., works, frt. equald lb. .75 - —
l.c.l., same basis lb. .77 - —
o-Chlorobenzaldehyde, dms., t.l., works lb. 1.05 - —
l.t.l., works lb. 1.20 - —
p-Chlorobenzaldehyde, dms., c.l., works lb. 1.95 - 2.00
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms lb. .30 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
powd., dlvd. E., 100% basis lb. .86 - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .80 - —
o-Chlorophenol, dms., c.l., frt. equald. lb. .35½- —
l.c.l., same basis lb. .36½- —
p-Chlorophenol, dms., c.l., frt. equald lb. .35½- —
l.c.l., same basis lb. .36½- —
Chlorophyll, oil-soluble, not fixed, 4%, pails, tins, works lb. 4.25 - —
copper fixed, 6½%, tins, pails, works lb. 4.23 - —
dms., pails, works lb. 3.75 - —
8%, pails, dms., works lb. 4.00 - 4.80
14%, dms., works lb 8.90 - —
conc., dom., 50%, dms., works, 100% basis lb 42.00 - —
75% dms. works 100% basis lb 45.00 - —
90%-100%, dms., works, 100% basis lb 45.00 - —
imp., 60%, tins, 100% basis, lb 58.00 - —
75%, tins, 100% basis lb 58.00 - —
90%, tins, 100% basis lb 58.00 - —
Chloropicrin, coml., bots lb. 1.50 - —
cyls., 180 lbs., frt. alld lb. .95 - —
100 lbs., same basis lb. .97 - —
25 lbs., same basis lb. 1.22 - —
Choline bitartrate, fib. dms., frt. adjusted lb. 1.25 - 1.35
Chloride, fib. dms., frt. adjusted. lb. 1.25 - 1.35
Dihydrogen citrate, fib. dms., frt. adjusted lb. 1.25 - 1.35
Chromium acetate, soln., 7½%, bbls., works lb. .09½- —
cbys., works lb. .11¼- —
Fluoride, bbls., works lb. .51 - .52
Green (see Green, chrome).
Oxide (see Green chromium oxide).
Trioxide, NF., bots lb. .82 - .89
Yellow (see Yellow chrome).
Cinchona bark, NF, red, broken, bgs lb. .35 - .40
yellow broken, bgs lb. .35 - .40
Cinchonidine, cryst., cns., 100-oz. lots. oz. .65 - —
Sulfate, cns., 100-oz. lots oz. .35 - —
Cinchonine, cryst., cns., 100-oz. lots. oz. .52 - .57
Sulfate, NF, cns., 100-oz. lots oz. .27½- .30½
Cinchophen, NF, heavy density, dms., frt. adjusted lb. 3.70 - 4.05
standard density, dms., same basis lb. 3.50 - 3.85
Cinchophen-sodium, dms., frt. adjusted lb 4.50 - 4.85
Cinnamic alcohol (see Alcohol cinnamic).
Aldehyde, cns., dms lb 1.00 - 1.30
Cinnamon, Ceylon, No. 2, bgs lb. .76 - .77
"000," bgs., afloat lb. .96 - —
Citral bots., cns lb. 4.00 - 5.00
Citronellal, bots., dms lb. 3.10 - —
Citronellol, bots., dms. lb. 4.85 - 5.15
Civet, artif., bots lb. 13.75 -15.00
nat., bots oz. 7.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn. ton 19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton 10.00 - —
purif., bgs., c.l. Tenn ton 20.50 - —
imp., airfloated, bgs., c.l., Atl. port long ton 42.00 -45.00
lump, bulk, Atl. port long ton 27.00 -30.20
China, dom., dry-grd., airfloat, 99% 325 mesh, bgs., c.l., Georgia, works ton 10.00 - —
l.c.l., Georgia, works. ton 15.50 - —
300 mesh, bgs., c.l., Georgia, works ton 13.50 -14.50
l.c.l. ton 35.00 -36.00
imp., white, lump, bulk, c.l., ex dock, Phila., Portland, Me. gross ton 20.00 -35.00
powd., bgs., c.l., ex dock net ton 50.00 —
l.c.l., ex whse. net ton 60.00 -65.00

Clove, Madagascar, bgs lb. .39 - .40
Zanzibar, bgs. lb. .48 - —
CMC, crude, 96%, low or medium vis., bgs., or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb. .37 - —
less than 23,000 lbs., dlvd. E., 100% basis lb. .41 - —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .37 - —
l.c.l., dlvd E. 100% basis. lb. .41 - —
purif., high vis. (see Gum Cellulose).
standard, low or medium vis., bgs., 23,000 lbs. or over, works, frt. alld lb. .55 - —
smaller lots, same basis lb. 57 - —
CMC prices W of the Rockies are 2c. per lb. lower, and are on a works basis.
Coaltar, crude, resale for soins., dms., c.l., ex-whse gal. .255 - —
l.c.l. ex-whse gal. .275 - —
tanks, ex works gal. .155 .159
refd., resale, dms., c.l., ex-whse. gal. .2650- .32
l.c.l., ex-whse gal. .2850- .34
tanks, ex-whse gal. .1650- .1760
Cobalt acetate, 23.7%, dms., dlvd. lb. 1.20 - —
Carbonate, 46% powd., bgs., dlvd. lb. 1.85 - —
Chloride, 24.2% Co., dms., dlvd. lb. 1.20 - —

Cobalt hydrate, 60-61% Co., dms., dlvd lb. 2.62 - —
Linoleate, fused, 8½% Co., dms. lb. .75¾- —
liq., 6% Co., dms. lb. .61 - —
Metal, 97-99%, kgs., ex whse. lb. 2.60 - —
Naphthenate, liq., 6% Co., dms., dlvd lb. .48¼- —
Nitrate, 20.1% Co., bbls., dlvd. lb. 1.00 - —
Oxide, black, 72½-73½% Co., kgs. lb. 1.96 - —
70-71% Co., kgs. lb. 1.90 - —
Phosphate, powd., 32.1% Co., kgs., dlvd lb. 1.69 - —
Resinate, fused, 3% Co., dms. lb. .29¾- —
Sulfate cryst., 21% Co., dms., dlvd lb. .79 - —
monohydrated, 33% Co., dms., dlvd lb. 1.32 - —
Tallate, 6% Co., dms., dlvd lb. .43¾- —
Cocaine, USP, cns., 100-oz. lots oz. 17.80 - —
Hydrochloride, cns., 100-oz. lots. oz. 13.75 - —
Cocillana bark, bgs lb. .48½- .50
Cocoa butter, bgs lb. .47½- .51
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Hydrochloride, cns., 100-oz. lots. oz. 11.75 - —
Phosphate, USP, cns., 100-oz. lots. oz. 10.25 - —
Sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb. .20 - .22
blue, bls lb. .20 - .22
Colchicine, USP, bots., cns. oz. 33.50 -40.00
Colchicum root, bls lb. .45 - .55
seed, bgs lb. .75 - 1.00
Collodion, USP, dms lb. .32½- —
flexible, dms lb. .34 - —
Colocynth, pulp, bls lb. .25 - .30
Colombo root, bls lb. .15 - .16

Condurango bark, bales lb. .40 - .80
Copaiba balsam, cns., dms. lb. .90 - 1.20
Copper acetate, bbls., c.l., works lb. .43 - —
l.c.l., works lb. .44 - —
Carbonate, 55%, bgs., c.l., works. lb. .3825- —
l.c.l., works lb. .3975- —
Chloride, anhyd., bbls., works lb. .50¾- .51¼
cryst., bbls., works lb. .34¾- .35¼
Cyanide, tech., bbls., 20,000-lb. lots or more lb. .80½- —
1,000-lb. lots or more lb. .81½- —
smaller lots lb. .83½- —
Gluconate, dms. lb. 3.15 - 3.30
Hydrate, dms., c.l., frt. alld. E. Miss. lb. .57 - —
l.c.l., same basis lb. .57½- —
Metal, electrolytic, dlvd., Valley basis lb. .46 - —
Naphthenate, liq., 8% Cu, dms., frt. alld. lb. .24 - —
Nitrate, tech., cryst., bbls., works. lb. .33¼- —
Oleate, solid, 9% Cu, dms., works lb. .45 - —
Oxide, black, bbls., 100-2,000-lb. lots, works lb. .57 - .64½
red, 97%, USN Type I, 100-5,000 lb. lots, bbls lb. .69½- .83½
90%, USN Type II, bbls., 100-5,000 lots or more, works. lb. .57½- .67½
Oxychloride, dms., c.l., works lb. .55 - —
l.c.l., works lb. .55½- .65½
Quinolinolate, fib. dms lb. 4.25 - 4.50
Resinate, precip., dms., frt. alld lb. .31½- —
Sulfate, CP, gran., bbls., works lb. .2260- —
cryst., 99%, bgs., c.l., works. 100 lbs. 15.70 - —
l.c.l., same basis. 100 lbs 16.20 -18.70

DOW

In their brief but exciting history, chelating agents have encountered reactions ranging from scoffs and disbelief to over-zealous exaggeration about their application. But the air is clearing. Already they are serving as important tools in many industrial processes. This is the beginning of a series on chelating agents designed to further clarify what they are, what they will do—and won't do.

The Chemistry of Chelation: Part I

Chelation defined · Example of the reaction · Variety of applications · Future of chelating agents

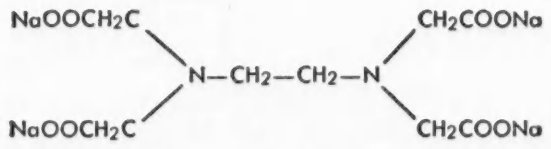
Polymerization of synthetic rubber controlled . . . soap kept white and sparkling on the dealer's shelf . . . textiles bleached and dyed with permanent uniform colors . . . pharmaceuticals stabilized. Unrelated reactions? Certainly. However, all are accomplished by a group of closely related chemicals called chelating agents. How do they work? Well, it's not magic, but chemistry—in a way, fairly basic chemistry. But let's begin at the beginning.

What Is Chelation?

Let's look at the word chelation. It is derived from the Greek word *Kelos* which means "claw." Simply stated, a chelate is a claw which holds a metallic ion inactive in solution. Chemically stated, chelation is a chemical reaction in which polyvalent metallic ions are reacted with organic reagents (chelating agents) to chemically inactivate these polyvalent metallic ions in the form of an extremely stable, water-soluble chelate.

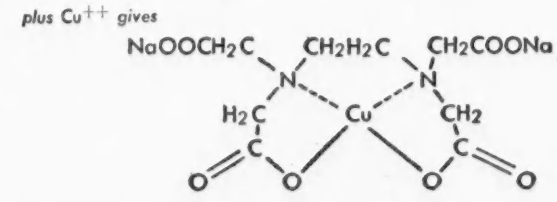
Typical Reaction

If we examine a typical reaction, the process of chelation becomes quite clear. Let us take, for example, the chemical structure of Versene®, one of the Dow chelating agents.



Versene

Now, if we place the Versene in a solution which contains free polyvalent ions of copper (Cu^{++}), the following is the result:



Versene Copper Chelate

The resultant compound is Versene copper chelate. The copper ion has become a member of an inner ring structure in the molecule. The result?

Copper sulfate, monohydrated, 36% dms., c.l., works..100 lbs.25.35 - —
l.c.l., works.....100 lbs.26.10 - —
tribasic, dealers, bgs., c.l., works, frt. equald..100 lbs.33.85 - —
l.c.l., same basis..100 lbs.34.85 -37.85
Undecylenate, dms.....lb. 2.00 - 3.00
Copra, Atlantic, Gulf ports, c.i.f. ton.157.50 - —
Pacific ports, c.i.f.....ton.152.50 - —
Coriander seed, Moroccan, bgs..lb. .09½- —
Roumanian, bgs.....lb. .08½- —
Yugoslavian, bgs.....lb. .08¾- .09
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.11 - —
l.c.l. .....100 lbs. 7.26 - —
Syrup, 42°, dms., c.l.....100 lbs. 7.08 - —
l.c.l. .....100 lbs. 7.23 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, NNR, bulk gram. 3.50 - 3.55
Cottonseed meal, exp. 41%, bgs., Memphis..ton.51.00 - —
solv., same basis.....ton.48.00 - —
Cramp bark, NF, bls..... lb. 85 - .91
Coumarin, NF, cryst., dms. .....lb. 3.20 - 3.45
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots. chys. lb. 3.05 - 3.26
Coaltar, crude, tanks, works, frt. adjusted gal. .22 - —
soln., 80%, tanks, works gal. .2068- —
refd., dms., c.l., works.... gal. .40 - .42
l.c.l., same basis.... gal. .50 - .53
tanks, same basis ..... gal. .30 - .33
Wood, beechwood, chys., dms lb. 1.60 - 1.65
hardwood, NF, bots., chys lb. 1.30 1.35
pinewood, dms., l.c.l., incl.. lb. .0634- —
c.l., incl ..... lb. .0561- —
tanks, works ..... lb. .0460- —
N.Y. whse., dms., l.c.l. incl.lb. .0745- —

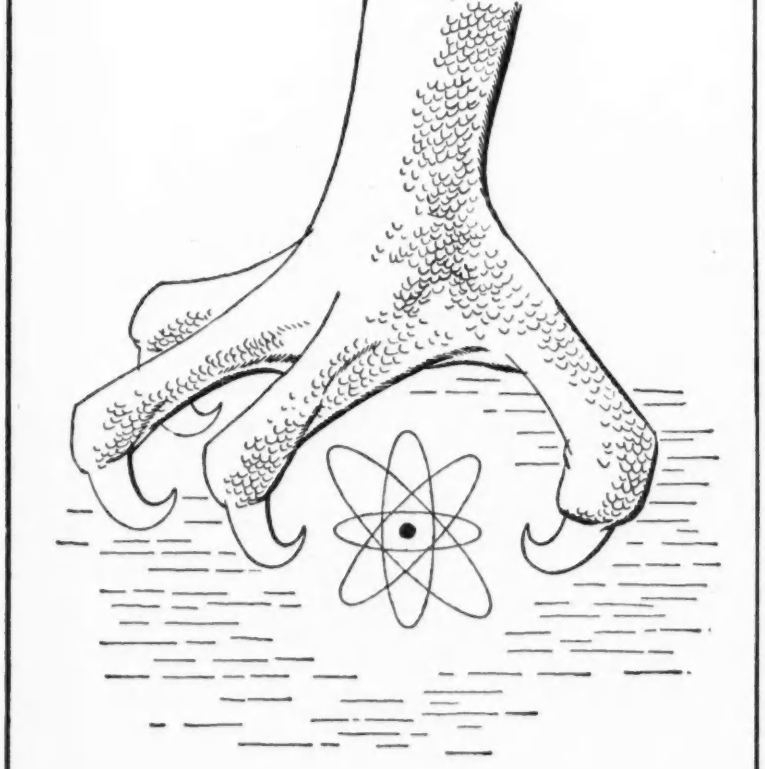
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. equald..lb. .1625- —
l.c.l., same basis....lb. .1675- —
tanks, same basis.....lb. .145 - —
USP, non-ret., dms., c.l., same basis..lb. .1775- —
l.c.l., same basis.....lb. .1825- —
tanks, same basis.....lb. .160 - —
m-Cresol, 95-98%, dms., c.l., works. lb. .60 - —
l.c.l., works.....lb. .61 - —
m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald..lb. .1775- —
l.c.l., same basis.....lb. .1825- —
tanks, same basis.....lb. .160 - —
2-97%, 2°C., dms., c.l., frt. equald. lb. .2175- —
l.c.l., same basis.....lb. .2225- —
tanks, same basis.....lb. .200 - —
o-Cresol, m.p. over 30°C., ret. dms., c.l. frt. equald lb. .173 - —
l.c.l., same basis .....lb. .176 - —
tanks, same basis .....lb. .16 - —
29°C., ret. dms., c.l., frt. equald. lb. .16 - —
l.c.l., same basis .....lb. .16½- —
tanks, same basis .....lb. .15 - —
25-29°C., dms., c.l., frt. equald..lb. .153 - —
l.c.l., same basis .....lb. .156 - —
tanks, same basis .....lb. .14 - —
p-Cresol, 98%, dms., c.l., dlvd...lb. .50 - —
l.c.l., dlvd .....lb. .51 - —
tanks, dlvd .....lb. .49 - —
Methyl ether, cns.....lb. 1.90 - 2.50
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .24¼- .25
Cryolite, nat., indust., bgs., c.l., works 100 lbs.13.00 - —
l.c.l., works 100 lbs.14.25 - —
Insecticide, dealers, bgs., c.l., dlvd 100 lbs.16.75 - —
l.c.l., dlvd ..... 100 lbs.17.75 - —

Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .27 - .30
l.c.l., works ..... lb. .28 - .31½
Cuheb berries, XX, NF, bgs.....lb. .60 - .65
powd., es.....lb. .75 - .80
Cumene, dms., c.l., works.....lb. .12 - —
l.c.l., works .....lb. .14 - —
tanks, works .....lb. .11 - —
Cumin seed, Iranian, bgs.....lb. .15½- .16
Turkish, bgs. .....lb. .14½- .15
Cutch extract, 55% tannin, bgs., ex dock, duty extra lb. .08½- —
Cyanamide, fertilizer mixing grades, 21% N, gran., bgs., Niagara Falls, Ont., contract ton.55.00 - —
pulv., 21% N, bgs., works, unit-ton. 2.75 - —
indust. grade, bgs., c.l., works ton.75.00 - —
t.c.l., bgs., works ... ton 96.00 - —
6-16 mesh, dms, c.l., works.ton 120.00 - —
l.c.l., works ton.140.00 - —
Cyclohexane, 99% tech., dms., c.l., works gal. .70 - —
l.c.l., works ..... gal. .72 - —
tanks, works ..... gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .28½- .37¾
l.c.l., works, same basis.... lb. .30 - .38¼
tanks, works, same basis .... lb. .27 - .36¼
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
l.c.l., works..... lb. .35 - —
tanks, works ..... lb. .32 - —

Cyclohexene, min. 98%, b.r. 82.5°C-85°C, 360-lb. dms., c.l., works lb. .55 - —
l.c.l., same basis.....lb. .60 - —
tanks, same basis.....lb. .52 - —
Cyclohexylamine, dms., c.l., works. lb. .46½- —
l.c.l., works .....lb. .48½- —
tanks, works .....lb. .45 - —
Cyclopropane CP, 2-lb. cyls., works. cyl.48.00 - —
6 oz. cyls., works ... cyl.12.00 - —
USP, hospitals, cyls., 40-gal. lots, gal. .38 - —
100-gal. lots ..... gal. .37 - —
200-gal. lots ..... gal. .36 - —

D

2-4-D, tech. dms. c.l., works, frt. equald lb. .37 - —
l.c.l., same basis ..... lb. .42 - .46
Butyl ester, dms., c.l., works. lb. .40 - —
l.c.l., same basis..... lb. .45 - .49
tanks, same basis ..... lb. .39 - —
Isopropyl ester, dms., c.l., works.lb. .40 - —
l.c.l., works ..... lb. .45 - .49
tanks, works ..... lb. .39 - —
Dandelion root, bls ..... lb. .35 .40
DDD, tech., flake, grd., fib. bgs., c.l., works lb. .45 - —
l.c.l., works ..... lb. .46 - —
DDT powder, bgs., c.l., works, frt. equald lb. .23 - .27
smaller lots, same basis.... lb. .25 - .26¾
fib. dms., c.l., same basis....lb. .24 - .28
smaller lots, same basis ....lb. .26 - .27¾
1-Decanol, tech., dms., c.l., dlvd lb. .41 - —
l.c.l. dlvd. ..... lb. .43 - —
tanks, dlvd ..... lb. .38½- —
Deertongue leaves, bls..... lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton.49.50 - —
14½% P, paper bgs., c.l., t.l., works ton.48.00 - —
17%P paper bgs., c.l., t.l., works ton.56.00 - —
18% P, paper bgs., c.l., t.l., works..ton.62.10 - —
Degras, common, bbls ..... lb. .11 - .12
neutral, less 2% f.f.a., bbls.... lb. .21 - .22
over 2% f.f.a., bbls ..... lb. .20 - .21
d-Desoxyephedrine hydrochloride bots.24.00 -25.00
dl, bots. ..... lb 6.50 —
Dextrin, corn, gum, paper bgs., c.l.. 100 lbs. 9.15 - —
l.c.l. ..... 100 lbs. 9.30 - —
canary, paper bgs., c.l. 100 lbs. 8.89 - —
l.c.l. ..... 100 lbs. 9.04 - —
dark, paper bgs., c.l...100 lbs. 8.89 - —
l.c.l. ..... 100 lbs. 9.14 - —
white, paper bgs., c.l. 100 lbs. 8.73 - —
l.c.l. ..... 100 lbs. 8.88 - —
Corn dextrin in cotton bgs. 25c. per 100 lbs. higher.
Potato, imported, bgs ..... lb. .10½- .11
Dextrose, USP, dms ..... lb. .17¾- —
Diacetone (see Alcohol diacetone).
Diacetyl, flavor grade, bots lb. 4.50 5.50
Di-sec-amyl phenol, dms., c.l., works lb. .30¾- —
l.c.l., works ..... lb. .32¼- —
tanks, works ..... lb. .28¾- —
Di-tert-amyl phenol, dms., c.l., works lb. .30¾- —
l.c.l., works ..... lb. .32¼- —
tanks, works ..... lb. .28¾- —
o-Dianisidine fib. dms ..... lb. 2.00 —
Dibenzyl sebacate, dms., c.l., works. lb. .89¾- .90
l.c.l., same basis ..... lb. .90¼- .91
tanks, same basis ..... lb. .88 - —
p-Dibromobenzene bgs., 500-lb. lots. lb. .55 - —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .32 - —
l.c.l., same basis ..... lb. .33 - —
tanks, same basis ..... lb. .30 - —
Sebacate, dms., c.l., works... lb. .66 - —
l.c.l., works ..... lb. .66½- .67
tanks, works, dlvd ..... lb. .64 - .64½
Tartrate, dms, works, frt. alld.lb. .64 - —
Dibutylamine, dms., c.l., dlvd... lb. .55 - —
l.c.l., same basis ..... lb. .56 - —
tanks, same basis ..... lb. .53 - —
2,6-Di-tert-butyl-p-cresol, dms., c.l., dlvd lb. .91 - —
l.c.l., dlvd. ..... lb. .95 - —
Dicapryl phthalate, dms., c.l., dlvd., lb. .30½- .31½
l.c.l., dlvd ..... lb. .31½- .32½
tanks, dlvd ..... lb. .29½- —
Sebacate, dms., c.l., works.... lb. .63 - —
l.c.l., works ..... lb. .63½- .64
tanks, works ..... lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
o-Dichlorobenzene, dms. c.l., frt. alld. E lb. .12¼- —
l.c.l., same basis ..... lb. .13¼- —
tanks, same basis ..... lb. .10¾- —
p-Dichlorobenzene, dms., c.l., frt. alld. E lb. .14½- —
l.c.l., same basis ..... lb. .17 - —
1,4-Dichlorobutane, dms., c.l. or t.l., works lb. .33½- —
l.c.l., or l.t.l., works ..... lb. .34 - —
tanks, works ..... lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
l.c.l., works ..... lb. .05¾- —
tanks, works ..... lb. .04¼- —
Dicyclohexylamine, dms., c.l., works. lb. .51 - —
l.c.l., works ..... lb. .51¾- —
tanks, works ..... lb. .49½- —
Dicyclohexyl phthalate, fib. dms., c.l., works, frt. alld lb. .58¼- .59
l.c.l., same basis ..... lb. .59¼- .60
Didecyl phthalate, works, dms., c.l. lb. .33½- —
l.c.l., same basis ..... lb. .34½- —
tanks, same basis ..... lb. .31½- —
Dieldrin, dms., frt. alld ..... lb. 1.80 - —
l.c.l., frt. alld ..... lb. 1.85 - —
Diethanolamine, dms., c.l., dlvd. E. lb. .26½- —
l.c.l., same basis ..... lb. .27½- —
tanks, same basis ..... lb. .24½- —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
l.c.l., same basis ..... lb. .48 - —
tanks, same basis ..... lb. .45 - —
Ethanolamines, dms., c.l., dlvd.lb. .69 - —
l.c.l. dlvd ..... lb. .70 - —
tanks, dlvd ..... lb .67 - —
Oxalate, dms., c.l., frt. alld. lb. .42 - —
l.c.l. same basis ..... lb. .43 - .45
tanks same basis ..... lb. .40 - —
Phthalate, dms., c.l., dlvd ..... lb. .27 - —
l.c.l., dlvd ..... lb. .28 - —
tanks, dlvd ..... lb. .25 - —
Sulfate, dms., c.l., works..... lb. .18¾- —
l.c.l., works ..... lb. .19¼- —
tanks, works ..... lb. .17 - —



They can descale boilers, soften water and cure acute lead poisoning. The number of current industrial and medical applications is large, but the potential in unexplored areas is enormous.

And the Future?

The future of these products will hinge on the imagination and insight of chemists and engineers, of production men and purchasing agents, in nearly every industry. Wherever metal contamination poses a problem or wherever controlled introduction of metal ions is desirable, these chemicals warrant investigation.

Versene and other Dow chelating agents won't solve them all. Chelation is not a panacea. It will work chemically in some areas—it will fail in others. However, it is Dow's intention to assist in every way in the uncovering of processes in which chelating agents can be profitably used. Inquiries on your company letterhead will be handled with dispatch. We will be pleased to provide information and technical assistance. Write to Technical Service and Development, Dept. SC900P-L, THE DOW CHEMICAL COMPANY, Midland, Michigan.

It is inactivated. It cannot react with soap to cause darkening and stain during storage.

It can't cause breakdown of pharmaceuticals. It can't cause any trouble anywhere because it is locked in the Versene claw. It will stay locked in unless it is desired to reverse the process. This reverse action is used in polymerization of synthetic rubber—ions of iron being released at a predetermined rate by the chelate.

Variety of Applications

The most important thing, however, is that this "claw" property of chelating agents such as Versene makes it possible to solve a multitude of processing problems in industry. They've been used in tanning leather and tenderizing peas.

The next three topics in this series

PART II April — The Versene and Versenol® series of Dow chelating agents (what they are, strength and stability features—Versenol lower cost, less strength). Also—how chelating agents are specified (product performance versus chemical composition).

PART III June — Specific chelating agents for specific applications—(agent for iron control depends on pH—Versene Fe-3 Specific® for iron and transition metals on the alkaline side, Versene T® for iron in presence of free caustic—other solutions to special problems).

PART IV August — Applications in specific industries (formulation of alkaline cleansers—stabilization of hydrogen peroxide and Kier boiling in textile processing—uniform control of metal trace catalysts in polymerization of synthetic rubber—other industrial applications).

you can depend on DOW CHEMICALS DOW

Diethylamine—Dyes, Coaltar

Diethylamine, dms., c.l., dlvd. E lb. .50½- —
l.c.l., same basis lb. .51½- —
tanks, same basis lb. .48½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .51 - —
l.c.l. same basis lb. .52 - —
tanks, same basis lb. .50 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., dlvd. E, lb. .17¼- —
l.c.l., same basis lb. .18¼- —
tanks, same basis lb. .15¼- —
Boriborate, dms., l.c.l. lb. .31 - —
Diethyl ether, dms., works lb. .47½- —
l.c.l., works lb. .48 - —
Monobutyl ether, dms., c.l., dlvd. E lb. .30¼- —
l.c.l., dlvd. E lb. .31¼- —
tanks, dlvd. E lb. .28¼- —
Acetate, dms., c.l., works lb. .30 - —
l.c.l. works lb. .30½- —
tanks, dlvd E lb. .28¼- —
Monoethyl ether, dms., c.l., dlvd. lb. .22 - —
l.c.l., dlvd lb. .23 - —
tanks, dlvd lb. .20 - —
acetate, dms., c.l., works lb. .26¾- —
l.c.l. works lb. .27¼- —
tanks, dlvd. E lb. .25¼- —
Monomethyl ether, dms., c.l., dlvd lb. .20½- —
l.c.l., dlvd lb. .21½- —
tanks, dlvd lb. .18½- —

Diethylenetriamine, dms., c.l., dlvd. E lb. .43½- —
l.c.l., dlvd. E lb. .44½- —
tanks, dlvd. E lb. .41½- —
Diethylstilbestrol, USP, bots., 10-kilo lots kilo. 100.00 -147.50
kilo. 110.00 -152.50
Digitalis leaves, USP, dom., dms., lb 90 1 10
Digitoxin, USP, bots. gram 5.00 - 5.50
Diglycol laurate dms ton lots lb. .35 - .38
Stearate dms., ton lots lb. .25 - —
Dihexyl sebacate, dms., c.l., works. lb. .64 —
l.c.l., works lb. .64½- .65
tanks, works lb. .62 —
Dihydrazine sulfate, dms., works. lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .063 - .07
Sulfate, bulk gram. .063 - .07
1,2-Dihydroxy anthraquinone, dms., works lb. 2.75 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
tech., dms lb. 1.09 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .16 - —
l.c.l., dlvd lb. .17 - —
tanks, same basis lb. .14 - —
Phthalate, dms., c.l., dlvd. E lb. .31 - —
l.c.l. same basis lb. .32 - —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., dlvd. E lb. .10 - —
l.c.l., dlvd. E lb. .11 - —
tanks, dlvd E lb. .08 - —

Di-iso-octyl phthalate, dms., c.l., dlvd. lb. .32½- —
l.c.l., same basis lb. .33½- —
tanks, same basis lb. .30½- —
Sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63¼- .64
tanks, works lb. .61 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¾- —
l.c.l., same basis lb. .23¼- —
tanks, same basis lb. .20¾- —
Di-isopropylamine, dms., c.l., dlvd. E. of Rockies lb. .50 - —
l.c.l., same basis lb. .51 - —
tanks, same basis lb. .48 - —
Dillseed, dewhiskered, bgs. lb. .10 - .10½
nat., bgs. lb. .09 - —
Dimethyl anthranilate, cns. lb. 5.25 - 5.75
Chloroacetal, dms., c.l., works lb. .45 - —
l.c.l., works lb. .50 - —
tanks, works lb. .40 - —
Dimethyl ethanolamines, anhyd., dms., c.l., dlvd lb. 1.22 - —
l.c.l., dlvd. lb. 1.23 - —
tanks, dlvd. lb. 1.20 - —
70%, dms., c.l., dlvd., 100% basis, contained lb. .68 - —
l.c.l., dlvd., 100% basis lb. .69 - —
tanks, dlvd. 100% basis lb. .66 - —
Hydroquinone, dms. lb. 1.70 - 2.75
Phthalate, dms., c.l., works lb. .29½- —
l.c.l., works lb. .30½- —
tanks, dlvd lb. .27½- —
tanks, works lb .16 - —
Dimethyl sebacate, dms., c.l., works. lb. 1.27 - —
l.c.l., works lb. 1.28 - —
Sulfate, 55-gal., ret. dms., c.l. works lb. .15 - —
l.c.l. works lb .16 - —
10-gal. ret. dms., l.c.l., works. lb. .16½- —

Dimethylamine, 25% soln., dms., c.l., frt. equald lb. .42 - —
l.c.l., frt. equald lb. .42½- —
tanks, frt. equald lb. .33 - —
40% soln., dms., c.l., frt. equald lb. .39 - —
l.c.l., frt. equald lb. .39½- —
tanks, frt. equald lb. .33 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .29½- —
l.c.l., frt. alld lb. .30½- —
tanks, frt. alld lb. .28½- —
N,N-Dimethylformamide dms., works. lb. .34 - .39
tanks, works lb. .33 - —
2,4-Dinitroaniline, dms., 1,000-lb. lots, frt. equald lb. .68 - —
smaller lots lb. .71 - —
m-Dinitrobenzene, 85°C., dms lb. .22 - —
89°C., dms lb. .24 - —
2,4-Dinitrochlorobenzene, crystalizing at 46½°C., dms., c.l., frt. alld. E lb. .15¼- —
l.c.l., frt. alld E lb. .15¾- —
tanks, frt. alld E lb. .15 - —
Crystalizing at 48°C., dms., c.l., frt. alld lb. .20¼- —
l.c.l. lb. .20¾- —
tanks lb. .20 - —
2,4-Dinitrophenol, bbls. lb. .37 - —
2,4-Dinitrotoluene, oily, dms. lb. .11 - —
refd., 63°C., dms lb. .23 - —
Dioctyl adipate, dms., c.l., works. lb. .44½- —
l.c.l. works lb. .45½- —
tanks, works lb. .42½- —
Phthalate, dms., c.l., frt. alld lb. .32½- —
l.c.l., frt. alld lb. .33½- —
tanks, frt. alld lb. .30½- —
Sebacate, dms., c.l., works, lb. .60 - —
l.c.l., works lb. .60½- .61
tanks, works, dlvd lb. .58 - .58½
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .60 - —
smaller lots, frt. alld lb. .61 - —
1,4-Dioxane, dms., c.l., works lb. .28¾- —
l.c.l., same basis lb. .29¼- —
tanks, same basis lb. .27 - —
Dip oil (see Tar acid oil).
Dipentaerythritol, bgs., l.c.l., works. lb. .35 - —
Dipentene, dest-dist., dms., c.l., works gal. .47 - —
l.c.l., works gal. .52 - —
ex-whse gal. .62 - —
steam-dist., dms., c.l., works, South gal. .59 - —
dlvd. N. Y. gal. .67 - —
tanks works, South gal. .45 - —
Diphenyl, bbls., c.l., works lb. .15 - —
l.c.l., works lb. .16 - —
Diphenyl in bags ¼c. lower.
Oxide, perfume grade, cns lb. .54 - .61
Phthalate, dms., c.l., works lb. .51¾- —
l.c.l., works lb. .53¾- —
Diphenylguanidine, bgs., dms., ton lots, frt. alld lb. .50 - —
smaller lots, frt. alld lb. .51 - —
Diphenylhydantoin-sodium USP, dms lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17¼- —
l.c.l., same basis lb. .18¼- —
tanks, same basis lb. .15¼- —
Monomethyl ether, dms., c.l., dlvd. E lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Divi-divi, 45% tannin, bgs., bls., c.l., U.S. ports, exdock ton 70.00 -72.00
Divinylbenzene, 20-25% dms., c.l., works, frt. equald lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
l.c.l., works, 100% basis lb. 1.05 - —
Dodecylbenzene, dms., c.l., frt. dlvd lb. .14 - —
l.c.l., same basis lb. .15 - —
tanks, same basis lb. .12 - —
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:—
Blue, FD & C, No. 1 lb. 15.65 -17.60
No. 2 lb. 15.65 -17.60
Green, FD & C, No. 1 lb. 15.65 -17.60
No. 2 lb. 19.60 -22.85
No. 3 lb. 21.30 -35.90
Red, FD & C, No. 1, cns lb. 5.90 - 7.85
No. 2 lb. 3.30 - 4.10
No. 3 lb. 19.60 -22.85
No. 4 lb. 5.55 - 7.50
Violet, FD & C, No. 1, cns lb. 15.65 -17.60
Yellow, FD & C, No. 1, cns lb. 9.15 -11.05
No. 5 lb. 3.30 - 4.10
No. 6 lb. 3.30 - 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—
Black, D&C, No. 1 lb. 10.50 -10.95
Brown, D&C, No. 1 lb. 15.65 -16.10
Green, D&C, No. 5 lb. 15.65 -16.10
No. 6 lb. 15.65 -16.10
No. 7 lb. 14.35 -14.80
Orange, D&C, No. 3 lb. 10.50 -10.95
No. 4 lb. 19.60 -20.05
No. 5 lb. 5.25 - 5.70
No. 17 lb. 10.50 -10.95
No. 18 lb. 23.55 -24.00
No. 19 lb. 15.00 -15.45
No. 21 lb. 3.10 - 3.60
No. 22 lb. 10.50 -10.95
No. 23 lb. 24.20 -24.65
No. 33 lb. 17.00 -17.45
Violet, D&C, No. 2 lb. 15.65 -16.10
Yellow, D&C, No. 7 lb. 10.50 -10.95
No. 8 lb. 10.50 -10.95
No. 10 lb. 13.05 -13.50
No. 11 lb. 13.05 -13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 1-lb. lots, works, 25-50 lb. lots, dlvd:—
Blue, Ext., D&C, No. 1, cns lb. 15.65 -16.10
Green, Ext., D&C, No. 1, cns lb. 15.65 -16.10
Red, Ext., D&C, No. 1, cns lb. 13.05 -13.50
Yellow, Ext., D&C, No. 1, cns lb. 10.50 -10.95
Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd. No.
20 Chrysoidine Y, dustless lb. .89 - —
27 Fast light, orange 2G lb. 1.09 - —
31 Phloxine 2G lb. .89 - —
36 Yellow 2G lb. 1.00 - —
40 Orange R extra, conc lb. 1.29 - —
57 Fuchsine 6B lb. 1.31 - —
79 Scarlet 2R lb. .98 - —
151 Orange AD lb. .67 - —
161 Orange RR lb. .80 - —
176 Fast red A lb. 1.18 - —
179 Rubine XX, conc lb. 1.25 - —
180 Blue F4B lb. 1.11 - —
561 Brown B lb. 2.45 - —
581 Black EB, 200% lb. 1.13 - —
185 Brilliant scarlet 3RU, conc. lb. 1.03 - —
202 Chrome blue black R, conc. lb. .91 - —
203 Chrome black T lb. .94 - —
208 Fast blue SR lb. 1.10 - —
216 Chrome red B lb. .92 - —
234 Brown Y lb. 1.08 - —
246 Blue black, extra, conc lb. 1.16 - —
275 Milling red 3R, conc lb. 1.62 - —
289 Navy blue 3R, conc lb. 1.44 - —
299 Black F, conc lb. 1.86 - —
304 Neutral black 2B, conc. lb. 2.43 - —
326 Fast scarlet 4BNC lb. 1.80 - —
332 Bismark brown RX, conc., dustless lb. 1.16 - —

New development from Du Pont

C.P. AMMONIUM HYDROXIDE

C.P. SULFURIC ACID

C.P. GLACIAL ACETIC ACID

C.P. HYDROCHLORIC ACID

Now . . . Du Pont Reagents come in throw-away cases and bottles

This Du Pont development brings welcome news to every user of C.P. Reagents. Throw-away packages for 5-pint units mean new convenience and economy.

• NO DEPOSIT • NO BOOKKEEPING • LESS BREAKAGE • LIGHTER WEIGHT
• NO RETURNS • LESS STORAGE SPACE • GREATER SAFETY • LOWER FREIGHT

New Du Pont safety sleeve (*right*), also on 5-pint bottles, is an added feature for safe handling. And each reagent bears a different colored label. Caps and labels match for added safety.

E. I. du Pont de Nemours & Co. (Inc.),
Grasselli Chemicals Dept.,
Wilmington 98, Del.

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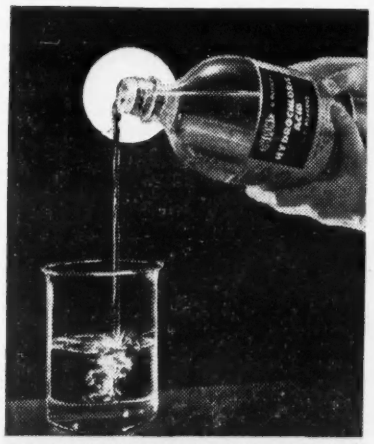
BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY



NO DRIPS! NEW DU PONT SAFETY SLEEVE of "Alathon"® polyethylene resin prevents drippage . . . protects hands.

*Not yet approved for throw-away cases.

DU PONT C. P. REAGENTS

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C. P. HYDROCHLORIC ACID • C. P. NITRIC ACID*

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Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour index scale or prototype), contract dlvd. No				
365 Brilliant yellow, conc	lb.	3.11	-	—
382 Scarlet B	lb.	2.20	-	—
401 Diazo black BHD	lb.	.79	-	—
406 Blue 2B, extra conc	lb.	1.30	-	—
419 Red FC	lb.	1.23	-	—
420 Brown M	lb.	1.19	-	—
448 Red 4BX, conc	lb.	1.43	-	—
518 Diamine sky blue FF, extra, conc	lb.	1.65	-	—
593 Green BY, conc	lb.	.87	-	—
596 Yellow Brown K, extra	lb.	1.08	-	—
620 Yellow 2G	lb.	1.11	-	—
639 Fast Yellow GG	lb.	1.97	-	—
640 Yellow XX	lb.	1.95	-	—
655 Yellow OX	lb.	2.24	-	—
657 Green V	lb.	2.31	-	—
662 Brilliant green G	lb.	3.07	-	—
667 Milling green 6B, conc	lb.	4.05	-	—
671 Blue EG	lb.	1.68	-	—
681 Crystal violet powder	lb.	2.15	-	—
698 Violet 6BN Powder	lb.	1.91	-	—
720 Brilliant blue BBG	lb.	2.07	-	—
729 Blue B, conc	lb.	3.06	-	—
749 Red BX	lb.	.87	-	—
814 Yellow NN, conc	lb.	3.11	-	—
841 Safranine GF, extra, conc.	lb.	3.48	-	—
865 Nigrosine J	lb.	4.76	-	—
922 Blue GXX	lb.	1.88	-	—
978 Black GXCF, conc	lb.	.32	-	—
1034 Alizarine red SC	lb.	2.85	-	—
1054 Alizarine blue SAPX	lb.	3.20	-	—
1078 Alizarine green CG, extra.	lb.	2.99	-	—
1085 Alizarine blue black B	lb.	2.56	-	—
1096 Golden orange GFD, single paste	lb.	2.19	-	—
1099 Dark blue BO, single paste.	lb.	1.93	-	—
1101 Jade green N, double paste.	lb.	1.10	-	—
1106 Blue RS, double paste	lb.	3.26	-	—
1113 Blue BLFD, double paste	lb.	2.48	-	—
1150 Olive R, single paste	lb.	1.21	-	—
1151 Brown R, single paste	lb.	1.94	-	—
1171 Indigo synthetic, 20% paste.	lb.	.31	-	—
1217 Orange RD, double powder.	lb.	3.94	-	—
p-4 Brown PG	lb.	2.54	-	—
p-14 Brown EB	lb.	1.83	-	—
p-24 Gray L	lb.	1.76	-	—
p-80 Diazo brilliant scarlet ROAD	lb.	3.07	-	—
p-202 Diazo black VJ, conc	lb.	2.10	-	—
p-244 Brilliant scarlet BN	lb.	1.44	-	—
Dyes, coaltar, oil soluble, 100 lb. dms., dlvd.				
24 Oil orange Z-7078	lb.	1.06	-	—
73 Oil scarlet ZBL	lb.	1.44	-	—
800 Chinoline yellow ZSS	lb.	2.67	-	—
860 Induline base ZM	lb.	1.07	-	—
860 Induline base Z2R	lb.	1.07	-	—
Dyes, coaltar, for stains, oil soluble, 100-lb. dms., sellers' works,				
1073 Oil violet ZIRS	lb.	6.81	-	—
1078 Alizarine cyanine green base Z	lb.	6.13	-	—
1080 Oil violet special Z	lb.	6.81	-	—
p-813 Naphthol SWF	lb.	2.03	-	—
Oil black ZBC	lb.	4.46	-	—
Oil black ZBD	lb.	3.03	-	—
Oil black ZHH	lb.	4.61	-	—
Oil black ZMM	lb.	6.52	-	—
Oil blue ZN	lb.	8.02	-	—
Oil blue ZV	lb.	4.95	-	—
Oil orange ZMG	lb.	1.32	-	—
Oil red Z-1700	lb.	1.49	-	—
Oil yellow ZG, conc	lb.	6.33	-	—
Dyes, coaltar, spirit soluble, 100 lb. dms. dlvd.				
p-517 Spirit yellow ZR	lb.	4.62	-	—
p-520 Spirit orange ZR, conc	lb.	5.87	-	—
Spirit black ZRB	lb.	2.95	-	—
Spirit brown ZG	lb.	5.30	-	—
Spirit red ZB, conc	lb.	6.41	-	—

E

Echinacea root, bls	lb	1.10	-	—
Egg albumin (see Albumin).				
Yolk, dried, dom., bbls	lb.	1.02	-	1.04
tanners bbls	lb	.06	-	.06½
Elm bark, grinding, bls	lb.	.30	-	.32
powd., bbls., bxs	lb.	.45	-	—
select, bundles	lb.	.75	-	—
Emetine hydrochloride, USP, bots	oz.	42.50	-	44.00
Endrin, tech., dms., dlvd., 100% basis	lb.	3.75	-	—
Ephedrine, syn., USP, anhyd., bots., 100-oz. lots	oz.	.98	-	1.00
hydrous, bots., 100 oz. lots	oz.	.92	-	—
Hydrochloride, tins, 100-oz. lots.	oz.	.75	-	—
Sulfate, cryst., tins, 100-oz. lots.	oz.	.72	-	—
powd., tins, 100-oz. lots	oz.	.73	-	—
Epichlorohydrin, dms., c.l., dlvd	lb.	.35	-	—
l.c.l., dlvd	lb.	.36	-	—
tanks, dlvd	lb.	.33	-	—
Epinephrine, syn., USP, bots., 100-gram lots	gram.	.60	-	—
Epsom salt (see Magnesium sulfate).				
Ergosterol, unirradiated, cryst	kilo.	150.00	-	—
Ergot, NF, dms., tin-lined	lb.	2.00	-	—
Eserine salicylate, bots	oz.	84.00	-	—
Sulfate, bots	oz.	84.00	-	—
Ether (see specific product).				
Ethyl acetate, nat., ferment., 85-88%, dms., c.l., frt. alld	lb.	.13½	-	—
l.c.l., frt. alld	lb.	.14½	-	—
tanks, frt. alld	lb.	.11½	-	—
95-98%, dms., c.l., frt. alld.	lb.	.13¾	-	—
l.c.l., frt. alld	lb.	.14¾	-	—
tanks, frt. alld	lb.	.11¾	-	—
99%, dms., c.l., frt. alld	lb.	.14	-	—
l.c.l., frt. alld	lb.	.13	-	—
tanks, frt alld	lb.	.12	-	—
syn., 85-88%, dms., c.l., dlvd.	lb.	.13½	-	—
l.c.l., dlvd	lb.	.14½	-	—
tanks, dlvd	lb.	.11½	-	—
95-98%, dms., c.l., dlvd	lb.	.13¾	-	—
l.c.l., dlvd	lb.	.14¾	-	—
tanks, dlvd	lb.	.11¾	-	—
99%, dms., c.l., dlvd	lb.	.14	-	—
l.c.l., dlvd	lb.	.15	-	—
tanks, dlvd	lb.	.12	-	—
Acetoacetate, dms., c.l., dlvd	lb.	.58	-	—
l.c.l. dlvd	lb.	.59	-	—
tanks, dlvd	lb.	.56	-	—
Acrylate, dms., c.l., t.l., dlvd	lb.	.36-		—
t.l., dlvd	lb.	.37	-	—
tanks, dlvd	lb.	.34	-	—
Aminobenzoate, USP (see Benzocaine).				
Bromide, tech., 98%, dms., c.l., frt. alld. E	lb.	.41	-	.43
l.c.l., frt. alld. E	lb.	.43	-	.45
Butyl ketone, dms, c.l., works	lb.	.35½	-	—
l.c.l., works	lb.	.36	-	—
tanks, works	lb.	.34	-	—
Butyrate, works	lb	.80	-	1.02
Carbamate (see Urethane)				
Cellulose, vis. 7 cps., ngs., 5,000-lb. lots or more, works	lb.	.70	-	—
smaller lots, works	lb.	.72	-	.80
vis., 10, 20, 50, 100, 150 cps., ngs., 2,000-lb. lots or more, works	lb.	.65	-	.70
smaller lots, works	lb	.67	-	.81
Chloride, tech., cyl., works		.20	-	.22
dms., works	lb.	.18	-	.20
tanks, works	lb.	.10	-	—
Ethyl cinnamate, cns	lb.	2.71	-	3.45
Ether, absolute, ACS, dms	lb.	.27	-	—
anesthesia, USP, hospitals, 1-lb. cns	lb.	1.01	-	—
½-lb. cns	lb.	1.11	-	—
¼-lb. cns	lb.	1.21	-	—
Indust., c.l., dlvd	lb.	.12	-	—
l.c.l., dlvd. E	lb.	.13	-	—
tanks, dlvd. E	lb.	.10	-	—
Gallate, dms., 100 to 2,000-lb. lots	lb.	3.90	-	4.40
Iodide, cbys., works	lb.	3.30	-	—
Methacrylate, dms., c.l. and less than truckload, works, frt. equald	lb.	.51½	-	.52
Morphine hydrochloride, USP, bots	oz.	11.85	-	—
Nitrite (see Nitrous ether).				
Oenanthate, dms.	lb	1.00		1.50
Oleate, dms., l.c.l., works	lb.	No prices.		
Oxalate (see Diethyl oxalate).				
Silicate dist. (see Tetraethyl orthosilicate).				
40% available SiO_2, dms., c.l., dlvd	lb.	.49	-	—
l.c.l., dlvd	lb.	.50	-	—
tanks, dlvd	lb.	.47	-	—
Ethylethanolamines, mixed, dms., c.l., dlvd. E	lb.	.43½	-	—
l.c.l., dlvd E	lb.	.44½	-	—
tanks, dlvd. E	lb.	.41½	-	—
N-Ethyl-a-naphthylamine, dms., works,	lb.	1.02	-	—
N-Ethyl-o-toluidide, bbls.	lb.	.88	-	—
Ethylamine (see Mono Di- or Tri-)				
N-Ethylaniline, dms., c.l., frt. alld.	lb.	.51	-	—
l.c.l., frt. alld	lb.	.52	-	—
tanks, frt alld	lb.	.50	-	—
Ethylbenzene, 99%, dms., c.l.	lb.	.19½	-	.20¼
l.c.l.	lb.	.20½	-	.21¼
tanks	lb.	.18½	-	—
Ethylene dichloride, dms. c.l., dlvd.	lb.	.10¼	-	—
l.c.l., same basis	lb.	.12¼	-	—
tanks, same basis	lb.	.09	-	—
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.				
Glycol, indust., dms. c.l., dlvd. E.	lb.	.15½	-	—
l.c.l. same basis	lb.	.16½	-	—
tanks, same basis	lb.	.13½	-	—
Monobutyl ether, dms., c.l., dlvd. E	lb.	.21½	-	—
l.c.l., dlvd. E	lb.	.22½	-	—
tanks, dlvd. E	lb.	.19½	-	—
Monoethyl ether, dms., c.l., dlvd. E	lb.	.20½	-	—
l.c.l., dlvd. E	lb.	.21½	-	—
tanks, dlvd E	lb.	.18½	-	—
Acetate, dms., c.l., dlvd. E	lb.	.19	-	—
l.c.l., dlvd. E	lb.	.20	-	—
tanks, dlvd. E	lb.	.17	-	—
Monomethyl ether, dms., c.l., dlvd. E	lb.	.20½	-	—
l.c.l., dlvd. E	lb.	.21½	-	—
tanks, dlvd. E	lb.	.18½	-	—
Acetate, dms., c.l., dlvd. E	lb.	.28¾	-	—
l.c.l. dlvd E	lb	.29¼	-	—
tanks, dlvd E	lb	.27	-	—
Monostearate, triple pressed, dms	lb.	.34	-	—
Oxide, dms., c.l., dlvd. E	lb.	.21½	-	—
l.c.l. dlvd E	lb.	.24½	-	—
tanks, dlvd E	lb.	.15½	-	—
Trichloride (see Trichloroethane).				
Ethylenediamine, 85-88%, dms., c.l., dlvd E. 100% basis	lb	46		—
l.c.l. dlvd E. 100% basis	lb	47		—
tanks dlvd E. 100% basis	lb	44		—
Ethylvanillin cns. 25-lb lots	lb	6.75		7.30
smaller lots	lb	7.35		7.40
Eucalyptol, USP cns. dms	lb	1.40		1.50
Eugenol, USP bots.	lb	2.20		3.25
Euphorbia herb bls	lb	15		17

F

Feldspar, 140-200 mesh bulk, c.l., works	ton	15.50	-	—
Feldspar in bags $3 per ton higher				
Fennel seed, Argentine, bgs	lb.	.17½	-	—
Czech, medium, bgs	lb.	.11½	-	—
Indian, light, bgs	lb.	.11	-	.11¼
Roumanian, bgs.	lb.	.11	-	—
Fenugreek seed, Indian, bgs	lb.	.08½		.09
Moroccan, bgs.	lb	.08½		.09
Ferric acetate liquor, 28° bbls., c.l. works	lb	.09	-	—
l.c.l., works	lb.	.09¾	-	—
soln., USP IX cbys	lb	.16	-	—
dms	lb	.17	-	—
Cacodylate, NF, bots	lb.	13.00	-	14.00
Chloride, anhyd., tech., dms., c.l., works 100 lbs.		7.00	-	—
l.c.l., works 100 lbs.		7.85	-	—
Indust. cryst. bbls. c.l. works 100 lbs.		5.25		6.75
l.c.l., works 100 lbs.		5.75		7.25

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Solvent, extractant (antibiotics), chemical raw material.
ETHYL ACETATE
Solvent, chemical raw material.
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Solvent, chemical raw material especially in manufacture of barbiturates.
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sewage grade, tanks, frt. equald, 100% basis, 100 lbs. 3.50 - —
USP cryst. dms., works lb 07½- .09
Citrate, gran., dms. lb. .85 - —
Hypophosphite, NF, dms lb. 3.45 - —
Naphthenate, liq., 6% Fe., dms., frt. alld lb. .25¾- —
Oxalate, gran., dms lb. .55 - .87
Phosphate NF soluble, gran., pearls es lb. .64 - .65
Pyrophosphate, NF VII, soluble, gran. pearls. dms lb. .78 - .81
Resinate, 6¾% Fe dms., frt. alld lb. .29½- —
Stearate, dms. c.l., frt. alld lb. .37 - —
t.c.l. frt alld lb. .38 - .42
Sulfate, partially hydrated, bgs., c.l., works ton.31.75 -32.75
t.c.l., works ton 34 75 -40 75
lb. .27 - —
Ferric-ammonium citrate, brown, NF, gran., dms lb. .60 - .63
green, USP XII, gran., dms lb. .60 - .63
Oxalate, fine gran., dms lb. .25½- .28½
Ferric-potassium oxalate, fine gran., dms lb. .30½- .33½
Ferric-sodium oxalate, fine gran., dms lb. .25½- .29½
Ferrous gluconate, NF, dms lb. .94 - —
Sulfate, gran., bgs., c.l., works. ton.34.50 - —
t.c.l., dlvd. Metropolitan area .100 lbs. 3.35 - 4.25
bbls., c.l., works ton.40.00 - —
bulk, c.l., works ton.27.00 - —
USP, cryst., bbls., dms lb. .09½- .10
Fir, balsam, Canada, cns gal.32.00 - —
Oregon, bbls gal. 4.00 - —
Fishliver oil (see Oil fishliver).
Fishmeal, dom., menhaden, 60% protein grd., bgs., Chesapeake Bay area ton.141.00 - —
Scrap ton.137.00 - —
Fleaseed (see Psyllium seed)
Formaldehyde, USP, 37% (inhibited), methanol, Zone 1, dms., c.l., dlvd lb. .0675- —
t.c.l., works lb. .072 .0725
tanks, dlvd lb. .04 —
Zone 2, 12-15%, methanol, dms., c.l. dlvd lb. .071 —
tanks dlvd lb. .043 —
Methanol-free (uninhibited), Zone 1, tanks, dlvd lb. .0375- —
Zone 2, tanks, dlvd lb. .04 —
Fringetree bark, bls lb .60 .61
Fullers' earth, bgs., c.l., Ill. mines, ton 19 00 - —
powd., insecticide grade, dried, bgs., c.l., Ga. or Fla. mines ton 17 50 - —
calcined bgs. c.l., same basis ton 20 00 21 75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton.16.30 -17.00
200 mesh, bgs., c.l., same basis ton 17 50 -18 00
spent, bgs. c.l. shipg point ton 4.50 5 00
Furfural, dms., c.l., works lb. .13 - —
t.c.l. works lb 14 - —
tanks, dlvd E lb 12 - —
dlvd W lb 13 - —
Fusel oil, refd., dms., c.l., dlvd lb. .22 - —
t.c.l. dlvd lb .23 - —
tanks, dlvd lb .20 - —
Fustic extract, cryst., No. 1, bbls., t.c.l. lb. .47½- —
No. 2, bbls., t.c.l. lb. .45½- —
No. 3, bbls., t.c.l. lb. .43½- —
liq., No. 1, bbls., t.c.l. lb. .22½- —
No. 2, bbls., t.c.l. lb. .21½- —
No. 3, bbls., t.c.l. lb. .19 - —
solid, No. 1, bxs., t.c.l. lb. .45 - —

G

G salt, bbls, frt alld, 100% basis lb 73 - —
Gammapicoline (see g-Picoline)
Gelatin, edible, pure (pork skin), 75 Bloom test, bbls., c.l. lb. .48 - —
150 Bloom test, bbl., c.l lb. .59 - —
200 Bloom test, bbl., c.l lb. .66 - —
225 Bloom test, bbl., c.l lb. .70 - —
275 Bloom test, bbl., c.l lb. .77 - —
Gelsemium root, bls lb. 23 - .24
Gentian root, bls lb. .17 - .20
grd., bbls., bxs lb. .22 - .23
powd., bbls, bxs lb 23 - 24
Geraniol, extra, cns., dms lb 4.35 - 4.60
standard, cns., dms. lb 4.20 - —
Geranyl acetate, cns lb. 4.50 - 4.80
Ginger oleoresin, NF, from African root, bots lb 4.00 - 7 75
from Jamaican root, bots lb 6.00 -10 25
Root, African, bxs lb. .33 - .34
Cochin, bgs. lb. .2 - —
Jamaican, No. 2, bgs lb. .59 - .60
No. 3, bgs lb. .53 - .54
Nigerian, split, bgs lb. .28 - —
Glauber's salt, anhyd (see Sodium sulfate)
Glue, bone, extracted, 80 jellygrams, bgs. c.l., dlvd lb. .15 - —
104 jellygrams, same basis lb. .17 - —
131 jellygrams, same basis lb. .18 - —
164 jellygrams, same basis lb. .20½- —
191 jellygrams, same basis lb. .21 - —
222 jellygrams, same basis lb. .22 - —
Packers 40 jellygrams, bgs., c.l., dlvd lb. .14 - —
65 jellygrams, same basis lb. .14½- —
85 jellygrams, same basis lb. .15 - —
115 jellygrams, same basis lb. .15½- —
135 jellygrams, same basis lb. .18½- —
164 jellygrams, same basis lb. .19½- —
renderers' 115 jelly-grams, bgs., c.l., dlvd lb. .15 - —
Bone glue, t.c.l., prices 1c higher.
Hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .15 - —
95-121 bgs., c.l., dlvd lb. .16 - —
122-149 bgs., c.l., dlvd lb. .18½- —
150-177, bgs., c.l., dlvd lb. 21 - —
178-206, bgs., c.l., dlvd lb. 23½- —
178-206 bgs., c.l., dlvd lb. 23½- —
207-236, bgs., c.l., dlvd lb. .26 - —
237-266, bgs., c.l., dlvd lb. .28 - —
267-296 bgs., c.l. dlvd lb. .30 - —
Glue, hide, 299-330, bgs., c.l., dlvd, lb. .32 - —
331-362 bgs., c.l., dlvd lb. .34 - —
363-394, bgs., c.l., dlvd lb. .36 - —
395-427 bgs., c.l., dlvd lb. .38 - —
428-460, bgs., c.l., dlvd lb. .39 - —
461-494 bgs., c.l. dlvd lb 40 - —
495-529, bgs., c.l., dlvd lb 41 - —
Hide glue, t.c.l. prices 1c higher
Glycerine, nat., crude, saponification, 88% to refineries, tanks lb. .20 - —
soaplye, 80%, tanks lb. .18 - —
refd. BP 98% dms. c.l., dlvd lb. .31½- —
t.c.l., dlvd lb. .32 - —
tanks, dlvd lb .30 - —
dynamite, dms., c.l., dlvd lb. .31½- —
t.c.l., dlvd lb. .32 - —
tanks, dlvd lb 30 - —
Glycerine, nat., refd., high gravity, dms., c.l., dlvd lb. .31½- —
t.c.l., dlvd lb. .32 - —
tanks, dlvd lb. .30 - —
USP, CP, 95% dms., c.l., dlvd. lb. .30½- —
t.c.l., dlvd lb. .31 - —
tanks, dlvd lb. .29 - —
yellow, dist., dms., c.l., dlvd. lb. .31 - —
t.c.l., dlvd lb. .31½- —
syn., dms., c.l., dlvd lb. .31½- —
t.c.l., dlvd lb. .32 - —
tanks, dlvd lb. .30 - —
Glycine (see Acid aminoacetic).
Glycerol (see Gylcerine).
Glyoxal, 30%, dms., c.l., works lb. .18½- —
t.c.l., works lb. .19 - —
tanks, works lb. .18 - —
Golden seal root, NF, tested, bls. lb 2.25 - 2.50
powd., bxs lb. 2.75 - 3.25
Graphite, amorph., powd., bgs., fib. dms., ex whse lb. .06 .09½
crystalline, 88-90%, powd., bgs., fib. dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2, 90-95% bgs. fib dms., ex whse lb. .29 .31
Grease, white, choice, all hog, tanks, dlvd lb. .07½- —
not all hog, tanks, dlvd lb. .07½- —
yellow, tanks, dlvd lb. .06½- .07
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs., works lb 5.10 - —
tungstated, PTMA, kgs. works. lb 6.40 - —
Chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., dlvd N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .40 - —
16-30%, bbls., same basis lb. .40 - —
31-45%, bbls, same oasis. lb. .41 - —
45-49%, bbls., same basis lb. .44 - —
reduced color, 25%, bbls., same basis lb. .19 - —
Chrome green prices are ½c. higher, dlvd., at the following points except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1½c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago
Chromium oxide, hydrated, dms., bbls., c.l., frt. alld lb. 1.00 - 1.10
pure, bgs., c.l., frt. alld lb. .42 - —
t.c.l. same basis lb. .43 - —
Dyes (see Dyes, coaltar)
Machalite, straight, PTMA, bbls., works lb. 4.00 - —
Paris (see Paris green).
Phthalocyanine toner, bbls., works. lb 3.95 - —
resinated, bbls lb 3 50 - —
water dispersable, bbls lb 1 71 - —
Pigment B, kegs lb 1 35 - —
paste, kegs lb .38 - —
Grindelia robusta herb, bls lb .38 .40
Guaiacol, NF, cryst, dms, tins lb 2 10 2 15
liq., cbys., dms lb 2.30 2 40
Carbonate, NF VII, dms lb 3 40 3 45
Gum, aloe (see Aloe).
Arabic, amber, sorts, bgs lb .22 .23
powd., USP, bbls lb .27 .28
Asafetida (see A).
Asphaltum (see A).
Benzoin, Sumatra, cs lb. .38 - .42
Camphor (see C).
Cellulose, high vis., bgs., 23,000-lb. lots or more, works, frt. alld lb. .55 - —
smaller lots, same basis lb. .57 - —
Copal, Congo, No. 1, bgs lb. .23 - —
No. 2, bgs lb. .18½ .20
No. 3, bgs lb. 16½ 18
Manila, C, bgs lb. .41 - .43
CBB, bgs lb. .37 Nom.
DBB, bgs lb. .31 .33
DK, bgs. lb. No stocks.
dust, bgs lb. .14 16
MA, soft, bgs lb. .23 - .25
WS, bgs lb. .34 36
Philippine, pale, chips, bgs lb. .24 - .26
bgs lb. .24 - .26
nubs, bgs lb. .34 - .36
seeds, bgs lb. .20 - .22
sorts, bgs lb. .22 - —
Pontianak, chips, bgs lb. .28 - —
nubs, bgs lb. .39 - .40
Dammar, Batavia, A E, cs lb. .27 - .29
dust, bgs lb. .16½- .17½
E, bgs lb. .20 .22
East India, batu, bold, bgs lb. .14 - .15½
nubs and chips, bgs lb. .08 - .09
black, bold, bgs lb. .14 - .16
unscraped, bgs lb. .11 - .13
nubs and chips, bgs lb. .11 - .13
pale, chips, bgs lb. .14½- .15½
nubs, bgs lb. .18 .19
Siam, cs lb. .39 —
Singapore, No. 1, bgs lb. .47 - .49
No. 2, bbls lb. .29 - .30
No. 3, bbls lb. No stocks.
dust, bgs lb. .16½- .17
seeds, bgs lb. .20 - .22
Ester, gum-rosin type, dms., c.l., dlvd, Ill., Md., Ky., Mich., Mid-Atl. States, N. E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va. W. Va lb. .14½- .16
Wood-rosin type, dms., c.l., same basis lb. .15 - .16
Guar, food grade, bgs., c.l lb. .40 - —
tech. grade, bgs., c.l lb. .32 - —
Karaya, No. 1, NF, powd., bbls. lb. .55 - —
No. 2, powd., bbls. lb. .45 - —
No. 3, powd., bbls lb. .40 - —
Locust bean, powd., bgs lb. .28 - .30
Myrrh, cs lb. .38 .40
Opium (see Opium).
Olibanum siftings, cs lb. .15 - .20
tears, cs lb 22 .30
Rosin (see Naval Stores, Protective Coatings Market).
Sterculia (see Gum Karaya).
Tragacanth, No. 1, ribbons, cs. lb 3.00 - 3.50
No. 2, cs lb 2.55 2 60
No. 3, cs lb 1.75 1.80
powd. USP, bbls lb. 1.25 1.35
Gypsum, plaster of paris, 100-lb. paper, bgs., trucks, dlvd. N Y C ton.20.30 - —
Terra alba, dom., paper bgs., same basis ton.20.00 - —
works, N. Y. C. ton.17.00 - —
imp., English, 100-lb. paper bags, ex dock, N. Y. C. ton 55 00 - —
ex warehouse ton.60.00 -62.00

H

Hawthorn berries, bgs lb. .24 - .28
Heliotropin, cryst., cns lb. 4.05 - 4.50
Hellebore root, dom., green, bls lb. .70 - .75
Helonias root, bls lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., t.c.l lb. .47 - —
No. 2, bbls., t.c.l lb. .43 - —
No. 3, bbls., t.c.l lb. .41 - —
No. 4 bbls., t.c.l lb. .39 - —
No. 5, bbls., t.c.l lb. .37 - —
paste, No. 1, bbls., t.c.l lb. .20½- —
Henbane leaves, bls lb. .35 - .40
Heptane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .14¾- —
Borger, Tex gal. .14¾- —
Hesperidin methylphaleone, bots., works, 50-lb. lots lb.22.50 - —
5-lb. lots lb.23.00 - —
1-lb. lots lb.23.50 - —
Hexachlorophene, dms lb 1.98 - —
Hexalin (see Cyclohexanol)
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or N.Y.C. lb. .222 - —
1,000-19,999-lb. lots, same basis lb. .242 - —
smaller lots, same basis lb. .242 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .239 - —
smaller lots, same basis lb. .249 - —
USP, dms., 500-lb. lots or more, same basis lb. .40½- —
smaller lots, same basis lb. .41½- —
Hexane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15½- —
Borger, Tex gal. .15½- —
n-Hexanol, dms., c.l., works lb. .34½- —
t.c.l., works lb. .35 - —
tanks, works lb .33 - —
Hexyl cinnamic aldehyde, dms lb. 4.00 - 7.50
Salicylate, dms lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .16 - —
t.c.l., dlvd lb. .17 - —
tanks, dlvd lb. .14 - —
n-Hexyl methacrylate, dms., less than truckload, works lb. .71 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb 14 00 - —
smaller lots, dlvd lb.14 50 - —
Histamine diphosphate, USP, bots. kilo 400.00 - —
l-Histidine hydrochloride, NF, fib. dms., 50-kilo lots, works. kilo 80.00 -85 00
1-5 kilo lots, works kilo 90 00 -95 00
Homatropine hydrobromide, USP bots oz. 8.50 - —
Methylbromide, USP, bots oz. 5.65 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton 6.25 - —
Horehound herb, bls lb 16 - 19
Hydrastine, bots oz.29.50 -31 00
Hydrochloride, NF, bots oz.29.50 -31.00
Hydrastis (see Goldenseal).
Hydrazine free base, ret. dms., Lake Charles, La lb 3 00 3 30
85% ret. dms. same basis lb 1.35 1.55
Hydrate, 100%, ret. dms., Lake Charles, La lb. 1.60 - 1.90
Hydrocortisone acetate, bulk, bots., dms gram. 4.75 - 5.00
Alcohol, bulk, bots., dms gram. 4.75 - 5.00
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb. .45 - —
t.c.l., works lb. .55 - .60
Fluoride anhyd., cyls., dlvd. E lb. .30½- .32½
dlvd. W lb. .39 - —
tanks, works lb. .21 - —
Peroxide, USP, bbls., dlvd lb. .03¾- .05
35%, dms., c.l., dlvd lb. .202 - —
t.c.l., dlvd lb. .211 - —
tanks, dlvd lb. .1800- —
Hydroquinone, photo grade, bbls., dms lb. .90 - 1.00
tech., dms., c.l., dlvd lb. .82½- —
t.c.l., same basis lb. .84½- —
Hydroxycitronellal, cns lb. 7.65 - 7.90
Hyoscine salts (see Scopolamine).
Hyoscyamine, bots oz.13.50 - —
Hydrobromide, bots oz. 6.00 - 7.00
Sulfate, bots oz. 7.00 - 7.50
Hypernic extract, cryst., No. 2, bbls., t.c.l lb. .52 - —
liq., No. 1, bbls., t.c.l lb. .35 - —
No. 2, bbls., t.c.l lb. .27 - —

I

Ichthammol, NF, jars lb. .75 - 2.37
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole CP, bots lb.17.00 -21.00
Inositol, bots., dlvd lb. 5.00 - —
ms., dlvd lb 4.50 4.75
Insect flowers (see Pyrethrum)
Iodine, crude, kgs lb. 1.42 - —
resub. USP, dms., jars lb. 2.30 - 2.32
Iodochlorohydroxyquinoline, USP, dms lb 5.90 - —
Iodoform, NF, dms., kgs lb 4.90 5.00
a-Ionone, cns. lb. 5.30 - 5.60
b-Ionone, cs. lb. 6.00 - 7.70
Methyl (see under M).
Ipecac root, bgs lb. 8.00 - —
powd., bbls., bxs lb. 9.00 - —
Irish moss, bleached, prime, bls lb. .28 - .34
Iron compounds (see Ferric or Ferrous).
Isoborneol, cns lb. 1.25 - 1.70
Isobornyl acetate, cns lb. .62 - .95
Formate, dms lb. .80 - —
Propionate, dms lb. 1.15 - 1.45
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
solvent grade, dms., c.l., dlvd. E. of Rockies lb. .13¾- —
t.c.l., same basis lb. .14¾- —
tanks, same basis lb. .11¾- —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
t.c.l., dlvd lb. .28½- —
tech., dms., c.l., dlvd lb. .21½- —
t.c.l., dlvd lb. .22½- —
tanks, dlvd lb. 19½- —
Isoeugenol, cns lb. 4.40 - 4.75
Isoniazid, powd., bulk, 25-kilo lots or more kilo 23 00 25 50
smaller lots kilo 24 00 26 00
Isopentane, comi. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isonicotinic acid hydrazide (see Isoniazid).
Isophorone, dms., c.l., works lb. .24¼- —
t.c.l., works lb. .24¾- —
tanks, works lb .22½- —
Isopropanol (see Alcohol, isopropyl).
Isopropyl acetate, dms., c.l., dlvd. lb. .12½- —
t.c.l., same basis lb. .13½- —
tanks, same basis lb. .10½- —
Alcohol (see Alcohol, Isopropyl).
Benzene (see Cumene).
Ether, dms., c.l., dlvd lb. .07 - —
t.c.l., dlvd lb. .08 - —
tanks, dlvd lb .05 - —
Isopropyl-N-(3-chlorophenyl) carbamate, (CIPC), 70% in xylol, dms., c.l., t.l., works lb. .70 - —
t.c.l., works lb. .714 - .814
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works. lb. .75 - —
t.c.l., works lb. .80 - .90
Isopropylamine (see Mono, Di, or Tri-).
Isoquinoline, dms., works lb. .65 - 1.25

J

Jalap root, NF, bls lb. .45 - .55
powd., bbls., bxs lb. .55 - .65
Juniper berries, bgs lb. .18 - .20
Tar, NF, dms lb. .42 - .60

K

Kaolin (see also Clay, China).
NF, powd., fib. dms lb. .10 - .12
colloidal, fib. dms lb. .15½- .17½
Kola nuts, bgs lb. .15 - —

L

Lactose, edible, fib. dms., 30,000-lb. lots, works lb. .19½- —
2,000-lb. lots, works lb. .20¼- —
200-1,800-lb. lots, works lb. .20¾- —
Edible lactose in bgs. 1c. lower.
fermentation grade, bgs., c.l., works lb. .08½- —
USP, fib. dms., 30,000-lb. lots, works lb. .21½- —
2,000-lb. lots, works lb. .22¼- —
200-1,800-lb. lots, works lb. .22¾- —
USP lactose in bgs. 1c. lower.
Lady's slipper root, bls lb. 1.70 1.75
Lanolin, cosmetic, dms., works lb. .28 - .50
USP, anhyd., dms., works lb. .26 - .28
hydrous, dms., works lb .25 .27
Lard, cash, dms., Chicago lb. .1180- —
ton.56.00 -56.50
Larkspur seed, bgs lb. .20 - .23
Laurel leaves, Greek, bls lb. .12 - —
Portuguese, bls lb. .11 - —
Turkey, bls lb. .25 - —
Yugoslavia, bls lb. .11 - —
n-Lauryl methacrylate, dms., c.l. or t.l., works lb. .65½- —
Lavender flowers, medium, bls lb. .75 - .80
grd., bls lb. .25 - .40
select, bls lb. .90 - —
Lead acetate, white, cryst., bbls lb. .23½- —
gran., bbls lb. .24½- —
powd., bbls lb. .24½- —
NF, cryst., gran., powd lb. .32½- .33½
Arsenate, acid powder, dealers, 3-lb. bgs. or larger, c.l., frt. alld on 96 lbs. or more lb. .27½- —
t.c.l., frt. alld lb. .28½- —
1-lb. bgs., c.l lb. .41½- —
t.c.l. lb. .42½- —
Blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .17¼- —
t.c.l., same basis lb. .18¼- —
Carbonate (see Lead, white, basic Carbonate).
Chloride, dms lb. .45 - —
Iodide, NF, V jars lb. 3.82 - —
Linoleate, fused, 26%% Pb, dms. lb. .33 —
Metal pigs, prime, N. Y lb. .16 - —
St. Louis lb. .1580 —
Metallic paste, dms., 20,000-40,000-lb. lots, works lb. .33¾- —
10,000-20,000-lb. lots, same basis lb. .34¾- —
200-2,000-lb. lots, same basis, lb. .35¾- —
Prices ex whse. Jersey City, N. J., 4½c. per lb. higher.
Monosilicate, bgs., c.l., works, frt. equald lb. .20 - —
t.c.l., same basis lb. .2075- —
Naphthenate, liq., 16% Pb, dms., dlvd lb. .17 - —
24% Pb., dms., dlvd lb. .21 - —
solid, 37% Pb., dms., dlvd lb. .27½- —
Nitrate, bbls lb. .23¾- —
Orthosilicate-silica gel, 50-60% PbO, dms., works lb. .29¾- .34¼
Peroxide, tech., powd., bbls lb. .38¾- .40¼
Phthalate, dibasic, dms., works lb. .41 - —
Red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. alld lb. .18½- —
t.c.l., same basis lb. .19 - —
97% Pb_3O_4, bbls., c.l., same basis, lb. .18¾- —
t.c.l., same basis lb. .19¼- —
90% Pb_3O_4, bbls., c.l., same basis, lb. .19 - —
t.c.l., same basis lb. .19½- —
Resinate, precip., 23% Pb, dms., dlvd lb. .32½- —
Salicylate, normal, dms., works. lb. .46 - —
Silicate (see Lead, white, basic, silicate).
Sulfate (see Lead, blue, basic sulfate, Lead, white, basic sulfate).
Tallate, liq., 16% Pb, dms. lb. .15 - —
24% Pb., dms. lb. .18½- —
solid, 30% lb. .23¾- —
White, basic, carbonate, bgs., c.l., shipt. point, frt. alld lb. .19 - —
t.c.l., same basis lb. .20 - —
silicate, bgs., c.l., shipt. point, frt. alld lb. .17¼- —
t.c.l., same basis lb. .18¼- —
sulfate, bgs., c.l., shipt. point, frt. alld lb. .17¼- —
t.c.l., same basis lb. .18¼- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works lb. .15 - .17
t.c.l., same basis lb. .15½- .17½
unbleached, non-ret. dms., c.l., same basis lb. .13 - .15
t.c.l., same basis lb. .14½- 16½
dl-Leucine, dms., works lb.12.25 -15.00
Licorice root, whole, bbls lb. .10 - .12
gran., bbls lb. .15 - .17
powd., bbls lb. .12 - .15
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½- —
t.c.l. works lb. .06¾- —
Lime, chemical (quicklime), bulk, c.l., metropolitan, N. Y. destination, freight equalized with nearest producing point ton.18.71 - —
Hydrated, bulk, c.l., same basis ton.20.21 - —
Spray, bgs., c.l., same basis ton.23.21 - —
Lime salts (see Calcium).
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite).
Limestone, grd., bgs., works ton. 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 5.45 - 6.85
ex lignaloe wood oil, dms. lb. 5.30 - 7.10

Linalyl acetate, ex bois de rose, 90-92%, dms.	lb.	5.50	- 5.80
96-98%, dms	lb.	6.75	- 7.15
ex petitgrain, bots.	lb.	5.95	- 6.70
Lindane, 25% formulation, dealers, dms., frt. alld.	lb.	1.00	- 1.09
99%, tech., formulators, dms., frt. alld.	lb.	2.65	- 3.25
Linden flowers with leaves, bls	lb.	.30	- —
without leaves, bls	lb.	.35	- —
Linseed meal, expeller, 32-34% bulk, Midwest, mills	ton.	52.50	-53.50
extracted, 36% bulk, same basis	ton.	46.50	-47.00
Litharge, coml., powd., bbls., c.l., works, frt. equald.	lb.	.17½	- —
l.c.l., same basis	lb.	.18	- —
Lithium benzoate, dms.	lb.	1.65	- 1.67
Bromide, NF, dms., works, frt. equald	lb.	2.30	- —
Carbonate, NF, dms., c.l., t.l., dlvd	lb.	1.29½	- —
ton lots to t.l., dlvd	lb.	1.30	- —
tech., dms., c.l., t.l., dlvd., frt. alld., works	lb.	.82	- 1.10½
l.c.l., same basis	lb.	.85	- 1.11½
Chloride, CP, anhyd., ton lots	lb.	1.28½	- —
tech., anhyd., dms., c.l., t.l., dlvd., or works, frt. alld.	cn.	1.00	- 1.05
l.c.l., same basis	lb.	1.05	- 1.05½
Citrate, NF, dms	lb.	1.60	- 1.64
Fluoride bbls., 10,000-lb. lots, dlvd	lb.	2.17½	- —
ton lots, dlvd	lb.	2.18½	- —
less ton lots, dlvd	lb.	2.23½	- —
Hydride, powd., dms., 500-lb. lots, works	lb.	12.00	- —
Hydroxide, monohydrate, dms., c.l., t.l., dlvd. or works, frt. alld.	lb.	.80	- .80½
l.c.l., same basis	lb.	.81	- .81½
Manganite, dms., works	lb.	.95	- 1.15
Nitrate, tech., dms., 100-lb. lots.	lb.	1.25	- —
Salicylate, dms	lb.	1.60	- 1.70
Silicate, dms., works	lb.	1.10	- 1.30
Stearate, dms., c.l., works	lb.	.47½	- —
ton lots, works	lb.	.48½	- —
less-ton lots, works	lb.	.53½	- —
Sulfate, dms., 100-lb. lots	lb.	1.45	- —
Titanate dms., works	lb.	1.15	- 1.35
Lithopone ord., bgs., c.l., dlvd	lb.	.07½	- —
l.c.l., dlvd	lb.	.08¼	- .08½
titanated (high-strength), bgs., c.l., dlvd	lb.	.10	- —
l.c.l., dlvd	lb.	.11	- —
Lithopone prices, Pacific Coast, 1c. per lb. higher.			
Lobelia herb, bls	lb.	1.50	- —
Lobeline sulfate, bots., works	oz.	37.50	-39.00
Logwood extract, cryst., No. 1, bbls., l.c.l.	lb.	.41	- —
No. 2, bbls., l.c.l.	lb.	.39	- —
liq., No. 1, bbls., l.c.l.	lb.	.20	- —
No. 2, bbls., l.c.l.	lb.	.19	- —
No. 3, bbls., l.c.l.	lb.	.18½	- —
solid, No. 1, boxes, c.l.	lb.	.35	- —
Lycopodium, cs	lb.	1.20	- 2.00
dl-Lysine hydrochloride, bots	kilo.	140.00	-150.00

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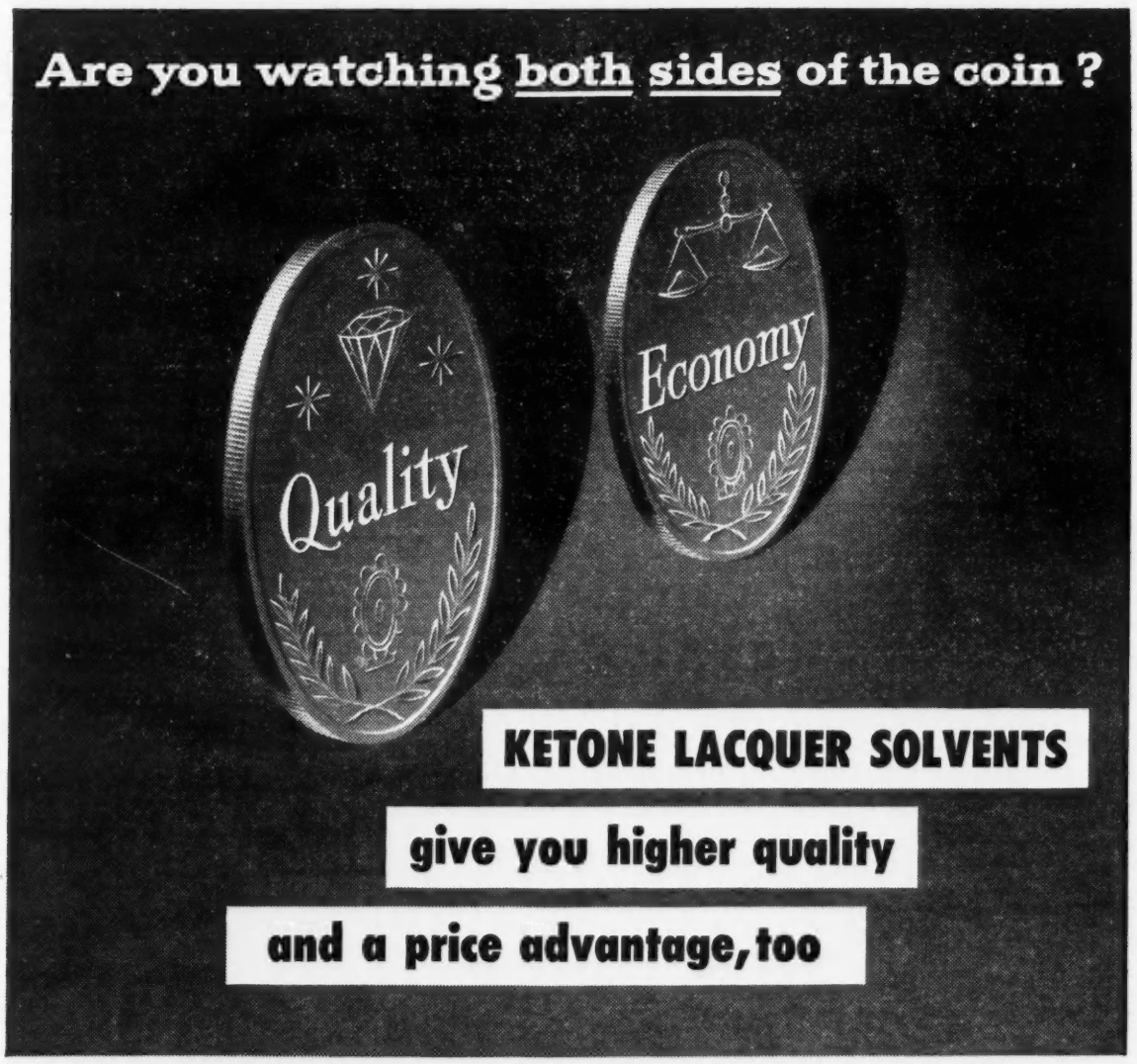
Mace, Siauw, siftings, bls.	lb.	2.35	- 2.73
West Indian, No. 1, bls. shipment	lb.	No prices.	
Magnesia, calcined, tech., bgs., ctns., works	lb.	.25¼	- .26
syn. rubber grade, light, bgs., c.l., works	lb.	.29¼	- —
l.c.l., works	lb.	.30	- —
extra light, works	lb.	.29¼	- .30
USP, light, ctns	lb.	.35	- .36
heavy, bbls	lb.	.45	- .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald	ton.	82.50	- —
dead-burnt, standard grain, bulk, c.l., Chewelah, Wash.	ton.	40.00	- —
Magnesium bromide, jars	lb.	.90	- 1.00
Carbonate, tech., bgs., c.l., frt. equald	lb.	.10½	- —
l.c.l., frt. equald	lb.	.12	- .13
truckloads, frt. equald	lb.	.11	- —
USP, bgs., c.l., frt. equald	lb.	.12½	- —
t.l., frt. equald	lb.	.13	- —
l.c.l. frt. equald	lb.	.14	- .15
Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points.			
Chloride, anhyd., 92% flake or pebble, dms., c.l., works	lb.	.12¾	- —
l.c.l. same basis	lb.	.14	- .15
hydrous, 99% flake, bgs., c.l., works	ton.	50.00	- —
l.c.l., works	ton.	55.00	-105.00
Gluconate, dms., cns	lb.	1.34	- 1.41
Hydroxide, NF, medicinal, bbls., dms., kgs	lb.	.26½	- .30
Metal, 99.8% ingots, 10,000 lb. lots or more, works	lb.	.32½	- —
pigs, 10,000-lb. lots or more, works	lb.	.33¼	- —
sticks, cs., works, frt. alld. on carlots	lb.	.53	- —
Oxide (see Magnesia, calcined).			
Peroxide, 15%, dms., works	lb.	1.00	- 1.05
Phosphate, tribasic, NF, bbls.	lb.	.75	- —
Silicate (see Talc).			
Silicofluoride, dms., works	lb.	.10	- .11½
Sulfate, tech., bgs., c.l., works	100 lbs.	2.15	- —
l.c.l., works	100 lbs.	2.90	- 3.15
USP, cryst., bgs., c.l., works.	100 lbs.	2.35	- —
l.c.l., 5,000 lbs., 1 withdrawal	100 lbs.	3.10	- —
smaller lots	100 lbs.	3.35	- —
Trisilicate, USP, dms., 5,000-lb. lots	lb.	.38	- —
1,000-lb. lots	lb.	.40	- —
100-lb. lots	lb.	.45	- —
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher.			
Malathion, dms., c.l., works	lb.	.90	- —
l.c.l., works	lb.	.92	- 1.02
Maleic anhydride, dms., c.l., dlvd. E	lb.	.27	- —
l.c.l., dlvd E	lb.	.28	- —
tanks, dlvd E	lb.	.26	- —
Prices on maleic anhydride W. of Rockies, 1½c. higher.			
Mandrake root, bls	lb.	.55	- .60
Manganese acetate, bbls., dlvd.	lb.	.35	- —
Arsenate, bgs.	lb.	.16	- —
Borate, tech., fib. dms.	lb.	.25	- —
Carbonate, bbls., works	lb.	.22	- —
Chloride, anhyd., dms., works	lb.	.25½	- —
Dioxide, African, 84-87%, 40,000 to 99,999-lb. lots, burlap paper lined, bgs., gross for net, works	ton.	97.00	- —
paper bgs., works	ton.	93.50	- —
dms., works	ton.	101.50	- —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.			
Gluconate, dms.	lb.	1.80	- 1.94
Hydrate, bbls., dlvd.	lb.	.36	- —
Hypophosphite, NF, dms.	lb.	3.52	- —
Linoleate, liq., 4.35% Mn., dms.	lb.	.32½	- —
solid, precip., 8.2% Mn, bbls.	lb.	.37½	- —
Manganese naphthenate, liq., 6% Mn., dms., frt. alld.	lb.	.27	- —
Resinate, fused, 3½% Mn, dms.	lb.	.24	- —
precip., 6½-7% Mn, dms.	lb.	.28	- —
Sulfate, fertilizer grade, 65%, bgs., c.l., dlvd. S. E.	ton.	80.50	- —
l.c.l., dlvd. S. E.	ton.	87.50	- —
Tallate, 6%, dms.	lb.	.24	- —
Mangrove bark, E. African, 38% tannin, c.l., ex dock	ton.	71.00	- —
So. American 30% tannin, c.l., tannin, c.l., ex dock	ton.	55.00	-58.00
Menthol, nat., USP, Brazilian, cs. works	lb.	6.85	- 7.00
single dm., works	lb.	.60	- —
ton-lots, works	lb.	.65	- —
MBT (see 2-Mercaptobenzothiazole).	lb.	.62	- —
MBTS (see Mercaptobenzothiazyl disulfide).			
Melamine, bgs., ton lots, works	lb.	.33	- —
500 to 2,000-lb. lots, works	lb.	.33½	- —
smaller lots, works	lb.	.38½	- —
Menadione, USP, bots.	gram	.044	.05
Menthol, nat., USP, Brazilian, cs	lb.	6.85	- 7.00
syn., USP, racemic, cns	lb.	4.95	- —
Menthyl salicylate tins	lb	4.00	4.25
2-Mercaptobenzothiazole, bgs., fib. dms., ton-lots, works, frt. alld	lb.	.40	- —
less ton lots, same basis	lb.	.42	- —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton-lots, works, frt. alld	lb.	.50	- —
less ton lots, same basis	lb.	.52	- —
Mercuric chloride, NF, cryst., dms., 50-lb lots or more	lb.	4.98	- —
gran., or powd., dms., 50-lb. lots or more	lb.	4.78	- —
Cyanide, NF VIII, powd., fib. dms.	lb	6.84	- —
Iodide, red, NF, fib. dms.	lb.	7.72	- —
Mercuric oxide, red, NF, powd., fib. dms	lb.	5.90	- 6.01
yellow, tech. (see Yellow mercury oxide).			
USP, fib. dms.	lb	6.14	- —
Mercurous chloride (see Calomel).			
Iodide, yellow, NF	lb	7.72	- —
Mercury, ammoniated (see White precipitate USP)			
Metal, 76 lb. per flask net-flask.		264.00	-267.00
Mesityl oxide, dms., c.l., dlvd	lb.	.1350	- —
l.c.l. dlvd.	lb	1450	- —
tanks, dlvd.	lb	1150	- —
Meta-aminophenol (see m-Aminophenol).			
Metachloroaniline (see m-Chloroaniline).			
Metanitroaniline (see m-Nitroaniline).			
Metanitroparatoluidine (see m-Nitro-p-toluidine).			
Metaphenylenediamine (see m-Phenylenediamine)			
Metatoluidine (see m-Toluidine).			
Metatolylenediamine (see 2,4-tolylenediamine).			
Methanol, nat., denaturing grade, tanks, frt. alld	gal.	.75	- —
Prices on natural methanol W. of Miss. 3c. per lb higher.			
syn., Zone 1, dms., c.l., dlvd. or truckload min. frt. alld.	gal.	.45	- —
l.c.l. same basis	gal.	.51	- —
tankwagon, 2,000-4,000-gal. lots, dlvd. Metropolitan area	gal.	.33	- —
4,000 gal., min., frt. alld. or dlvd	gal.	.30	- —
4,000 gal., min., works, Carteret, Camden, N. J.	gal.	.27½	- —
Methanol, syn., zone 2, dms., c.l., or truckload min. frt. alld. or dlvd	gal.	.48	- —
l.c.l., same basis	gal.	.54	- —
tankwagon, 2,000-4,000-gal. lots, min., dlvd. Metropolitan areas	gal.	.36	- —
tanks, 4,000 gal., min., frt. alld. or dlvd	gal.	.33	- —
Synthetic methanol zones are:—Zone 1 is all continental U. S. E of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.			
Methenamine (see Hexamethylenetetramine).			
dl-Methionine fib. dms., frt. alld.			
50-lb or more	lb	3.50	- —
feed grade, 98%, fib. dms., same basis	lb	2.63	- —
Methoxychlor 50% wettable powder, dealers dms., cs., frt. alld	lb.	.61	- .64
Methyl abietate non-ret. dms., c.l., dlvd zone 1	lb.	.20½	- —
l.c.l. same basis	lb.	.21	- —
hydrogenated, non-ret. dms., c.l., dlvd Zone 1	lb.	.21	- —
l.c.l., same basis	lb.	.21½	- —
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.			



LACQUER SOLVENT SYSTEMS based on *ketones* have so many inherent advantages they have become standard with the nation's foremost formulators of both nitrocellulose and vinyl coatings. Here are a few good reasons why:

- **Complete flexibility in formulating.** You add the latent solvents you prefer.
- **Yield solutions with high solids content**—or permit high diluent content, with either *aromatics* or *aliphatics*.
- **High purity** . . . *at no extra cost.* You get *all* active solvent.
- **Impart excellent flow,** blush resistance, high gloss.
- **Price advantage, too!** Low specific gravity ketones favor *you* when you buy by the pound and sell by the gallon.

The Shell Chemical "quality group" of solvents includes MEK, MIBK, EAK, MIBC, IPA and Ethyl Alcohol. Ask your Shell Chemical representative to help you evaluate ketones for your own formulations.

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Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld gal. .62½- —
syn., dms., c.l., frt. alld. E gal. .57 - —
l.c.l., frt alld E gal. .63 - —
tanks, frt. alld E gal. .45 - —

Synthetic methyl acetone E. territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four

Acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
l.c.l., dlvd lb. .40 - —
tanks, dlvd lb. .37 - —
Alcohol (see Methanol).
Amyl acetate, dms., c.l., dlvd. E. lb. .15½- —
l.c.l., dlvd. E lb. .16½- —
tanks, dlvd. E lb. .13½- —
Ketone, dms., works lb. 1.05 - —
Anthranilate, cns lb. 2.50 - 2.65
Benzoate, cns., dms lb. .53 - .65
Bromide, jobbers, cyls., various sizes, frt. alld. E lb. .47 - .61
Cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works. lb. .78 - —
2,000-lb lots and more, same basis lb. .65 - —
smaller lots, frt. alld. on 100 lbs lb. .89 - 1.00
standard vis., 15,400 cps.), 50-lb., bgs., c.l., frt. alld lb. .66 - —
2,000-lb. tots and more, same basis lb. .72 - —
smaller lots, frt. alld on 100 lbs lb .75 - .85

Methyl chloride, indust., cyls., frt. equald. lb. .21 - —
tanks, multi-unit, same basis lb. .15 - —
single unit, same basis lb. .11½- —
refrigerator mfrs., cyls., dlvd. lb. .46 - .48
other consumers or service men, cyls., dlvd lb. .67 - —
Chloroform (see 1,1,1-trichloroethane).
Cinnamate, cns lb. 1.43 - 1.80
Cyclohexanol, dms., c.l., works. lb. .35½- —
t.c.l., works lb. .36 - —
tanks, works lb. .34 - —
Ethyl ketone, dms., c.l., dlvd. lb. .13½- —
l.c.l., dlvd lb. .14½- —
tanks, dlvd lb. .11½- —
Formate refd., dms lb. .35 - .40
tech., non-ret. dms., any quantity, works lb. .10 - —
Heptin carbonate, bots lb. 33.00 - 42.00
p-Hydroxybenzoate fib dms lb 1.90 2.00
Ionone, standard, cns., dms. lb. 5.20 - 5.50
Isobutyl carbinol, dms., c.l., dlvd. lb. .15½- —
l.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .13½- —
Ketone, dms., c.l., dlvd lb. .15½- —
l.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .13½- —
Methacrylate, dms., c.l., t.l., frt. equald with Belle, W. Va. lb. .31 - —
smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —

Methyl naphthyl ketone, cryst., cns. lb. 3.00 - 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Roseaniline chloride, NF, fib. dms., 5-lb. lots lb. 5.64 - —
Salicylate, USP, cns., 500-lb. lots lb. .56 - —
Testosterone, USP, 100-gram bots. gram. .68 - —
2-Methylbenyzlamine, dms., l.c.l., works lb. 1.25 - —
2-Methylbenzyl dimethylamine, dms., c.l., works lb. 1.89 - —
l.c.l. works lb. 1.90 - —
2-Methyl-5-ethyl pyridine dms., c.l., works lb. .445 - —
l.c.l., works lb. .45 - —
tanks, works lb. .43 - —
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 3.25 - 3.60
smaller lots same basis lb. 3.40 - 3.60
Chloride, tech., dms., c.l., dlvd. E lb. .12½- —
t.c.l., same basis lb. .15 - —
tanks, same basis lb. .11¼- —
b-Methylnaphthalene 32°C. m.p., dms. works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint plastic, 100 mesh, bgs. c.l. works lb. .04¼- —
roofing, 20 to 80 mesh, works lb. .03 - .04
wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06¼- —
l.c.l., ex-whse. or frt. alld. E lb. .07 - —
paint or lacq., bgs., c.l., works, frt. alld lb. .07¾- —
t.c.l., ex-whse or frt. alld. E lb. .08½- —

Mica, wet-grd., rubber, bgs., c.l., works, frt. alld. E. lb. .07½- —
t.c.l., ex-whse. or frt. alld. E lb. .08½- —
wallpaper, bgs., c.l., works, frt. alld., E lb. .07¾- —
t.c.l., ex-whse. or frt. alld. E lb. .08¼- —
white, extra, fine, bgs., c.l., works, frt. alld. E lb. .07¾- —
t.c.l., ex-wnse or frt. alld. E lb. .08½- —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies, 1c. higher
Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap feed grade, tanks, New Orleans gal. .13 - .13½
New York gal. .16 - —
Molybdenum (metal), powd., 80 or 200 mesh, cns., works kilo. 8.80 - —
Trioxide, pure, dms., works lb. 1.10 - —
tech., dms., works, basis Mo. content lb. 1.31 - —
Monobutylamine, dms., c.l., E. of Rockies lb. .55 - —
t.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Monochlorobenzene, dms., c.l., frt. alld or dlvd. E lb. .10 - —
t.c.l., same basis lb. .11 - —
tanks, same basis lb. .08½- —
Monoethanolamine, dms., c.l., dlvd. E lb. .27 - —
t.c.l., same basis lb. 28 - —
tanks, same basis lb .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% contained amine, dms., c.l., dlvd. E lb. .35 - —
t.c.l., dlvd. E lb. .36 - —
tanks, dlvd. E lb. .33 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27 - —
t.c.l., same basis lb. .28 - —
tanks, same basis lb. .25 - —
Monoisopropylamine, dms., c.l., dlvd. lb. .32 - —
t.c.l., same basis lb. .33 - —
tanks, same basis lb. .30 - —
Monomethylamine, 30-35% soln., dms., c.l., frt. equald, 100% basis. lb. .40 - —
t.c.l., frt. equald 100% basis. lb. .40½- —
tanks, frt. equald 100% basis. lb. .31 - —
40% soln., dms., c.l., frt. equald., 100% basis lb. .37 - —
t.c.l., frt. equald, 100% basis. lb. .37½- —
tanks, frt. equald, 100% basis. lb. .31 - —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol)
Glutamate (see Sodium glutamate monobasic).
Phosphate (see Sodium phosphate monobasic).
Morphine, cns oz. 12.40 -12.60
Acetate, anhyd., cns oz. 9.95 -10.00
Hydrobromide, cns oz. 9.90 - 9.95
Hydrochloride, NF, cns oz. 9.90 - 9.95
Sulfate, USP, cns oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd. E lb. .54¾- —
t.c.l. dlvd E lb. .55¾- —
tanks, dlvd E lb. .52¾- —
Musk, syn., ambrette, 100-lb. lots, fib. dms lb. 5.15 - —
25-lb lots, cns lb 5.20 - —
5-lb lots, cns lb 5.30 - —
ketone, 100-lb. lots, fib. dms. lb. 5.30 - —
25-lb lots cns lb 5.35 - —
5-lb lots, cns lb 5.45 - —
25-lb lots, cns lb. 1.45 - —
5 lb. lots. cns lb 1.50 - —
xylol, 100-lb. lots, fib. dms lb. 1.40 - —
Mustard seed, Danish, yellow, bgs lb. .11 - .12
Dutch, bgs. lb. No prices.
English, yellow, bgs lb. .11½- .12
Montana, oriental, bgs lb. .09 - .09½
Myrobalans, J-1, assorted, bgs., ex dock ton. 68.00 Nom.
crushed, bgs., ex dock ton. 80.00 Nom.
Bombay, bgs., ex dock ton. 63.00 Nom.
Montana, oriental, bgs lb. .10½- —
extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .10 - .10¼

N

Naphtha, painters (see Petroleum naphtha V. M. & P.).
Solvent (see S)
Naphthalene, crude, dom., 74°, tanks, frt. equald lb. .06¼- —
78°, bgs., c.l., same basis lb. .07½- .08
l.c.l., same basis lb. .07¾- .08¼
tanks, same basis lb. .07 - —
imp., 78°, large lots lb. .07 Nom.
refd., indust., chipped or crushed, bgs., frt. equald lb. .12½- —
tanks, same basis lb. .11¾- —
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis. lb. .15½- —
cs., 50 lbs., c.l., same basis lb. .15¾- —
1-lb. pkgs., c.l., same basis. lb. .18½- —
a-Naphthol, bbls., frt. alld lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
t.c.l., works lb. .35 - —
Benzoate, fib. dms., works lb 3.00 - —
custom contract, works lb. 1.65 - —
Salicylate, dms lb. 5.00 - —
Sulfate, cns lb. 35.00 - —
a-Naphthylamine, bbls., frt. alld lb .50 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin, fib. dms., 1 kilo lots, basis, activity gram. .45 - —
500-999 gram lots, basis, activity gram. .50 - —
Nerolin, cns lb. 2.15 - 2.65
Niacin (see Acid nicotinic).
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd lb. .77 - .90½
Carbonate bbls., dlvd lb. .73¾ - .81¾
Chloride, bbls., dlvd lb. .38½- .46½
Formate, bbls., ton lots, frt. alld. lb. .68 - .69
Metal, electro cathodes, cs., works lb. .64½- —
Nitrate, bbls., works lb. .37 - .38
Oxide, black, bbls lb. .76 - —
green, bbls lb. .76 - —
Sulfate, bgs., c.l., dlvd lb. .30¼- —
t.c.l., dlvd lb. .31¼- .38¼
Nicotinamide, USP, dms., frt. adjusted kilo. 12.00 -12.30
Hydrochloride, dms., frt. adjusted. kilo. 11.50 -11.80

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★ for pH adjustment in ore processing

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INTERNATIONAL MINERALS & CHEMICAL CORPORATION • GENERAL OFFICES: 20 NORTH WACKER DRIVE, CHICAGO 6

SALES OFFICES: 20 NORTH WACKER DRIVE, CHICAGO 6 • 61 BROADWAY, NEW YORK 6 • MIDLAND, TEXAS

Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld	lb.	1.20	—
manufacturers, 500-lb. dms., frt. alld.	lb.	1.03	—
Niger seed, bgs	lb.	.11	.11½
Nikethamide, cbys	lb.	7.50	—
m-Nitroaniline, cryst., dms., frt. alld.	lb.	1.15	—
paste, 100% basis, dms., frt. alld.	lb.	1.10	—
o-Nitroaniline, flaked, 10,000 lbs. or more, dms.	lb.	.54	—
less than 10,000 lbs	lb.	.57	—
p-Nitroaniline, dms., frt. alld.	lb.	.445	—
Nitrobenzene, dbl. dist., dms., c.l., frt. alld	lb.	.12	—
l.c.l., frt. alld	lb.	.13	—
tanks, frt. alld	lb.	.11	—
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works	lb.	.34	—
l.c.l., same basis	lb.	.35	.37
18-25 cps., bbls., c.l., same basis	lb.	.36	—
l.c.l., same basis	lb.	.37	.39
250-400, 600-1,000 secs., bbls., c.l., same basis	lb.	.39	—
l.c.l., same basis	lb.	.40	.42
spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis	lb.	.41	—
l.c.l., same basis	lb.	.42	.44
5-6 cps., 40-60 secs., bbls., c.l., same basis	lb.	.40	—
l.c.l., same basis	lb.	.41	.43

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

o-Nitrochlorobenzene, dms., c.l., frt. alld	lb.	.20	—
l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.18	—
p-Nitrochlorobenzene, dms	lb.	.26	.27
2-Nitro-4-chlorophenol, dms	lb.	.75	—
Nitroethane, dms., c.l., dlvd. E	lb.	.24	—
l.c.l., dlvd. E	lb.	.24½	—
tanks, dlvd. E	lb.	.22½	—

Prices West of Rockies are 1c. higher.

Nitrogen solution, 37% N, tanks, frt. equald., per ton of product basis	ton.	47.50	—
40.8% N, tanks, same basis	ton.	32.15	—
Nitrogenous process tankage, bulk, works, unit-ton		4.00	5.10
Sewage sludge, bulk, works, unit-ton		2.95	+ .50
Nitromethane, dms., c.l., dlvd. E	lb.	.24	—
l.c.l., dlvd. E	lb.	.24½	—
tanks, dlvd. E	lb.	.22½	—

Prices West of Rockies are 1c. higher.

a-Nitronaphthalene, bbls., frt. alld.	lb.	.41	—
Nitropropane-1, and -2, dms., c.l., dlvd. E	lb.	.22½	—
l.c.l., dlvd. E	lb.	.23¼	—
tanks, dlvd. E	lb.	.21	—

Prices West of Rockies are 1c. higher.

o-Nitrophenol, dms., works, frt. equald	lb.	.94	—
p-Nitrophenol, dms., works, frt. equald	lb.	.50	—
o-Nitrotoluene, dms., c.l., frt. alld.	lb.	.10	—
l.c.l., frt. alld	lb.	.11	—
tanks, frt. alld	lb.	.09	—
p-Nitrotoluene, dms., works	lb.	.33	—
m-Nitro-p-toluidine, dms	lb.	1.59	—
Nitrous ether, conc., bots 100-lb. lots	lb.	1.28	1.35
Nonyl phenol, dms., c.l., frt. alld.	lb.	.26	—
l.c.l., frt. alld	lb.	.27	—
tanks, frt. alld	lb.	.24	—
Nutgalls, Aleppo, bgs	lb.	.36	.38
Chinese, bgs.	lb.	No prices.	
Nutmeg, East Indian, bgs	lb.	.66	.68
West Indian, bgs	lb.	.65	—
Nux vomica, bls	lb.	.10	.12
powd., bbls., bxs	lb.	.15	.17

O

Octane, indust., tanks, Bayonne, N. J	gal.	.19	—
Baytown, Tex	gal.	.15¾	—
Borger, Tex	gal.	.15¾	—
1-Octanol, tech., dms., c.l., dlvd.	lb.	.35	—
l.c.l. dlvd	lb.	.37	—
tanks, dlvd	lb.	.32½	—
Octyl phenol, bgs., c.l., works	lb.	.23¼	—
l.c.l. works	lb.	.23¾	—
tanks, works	lb.	.22½	—

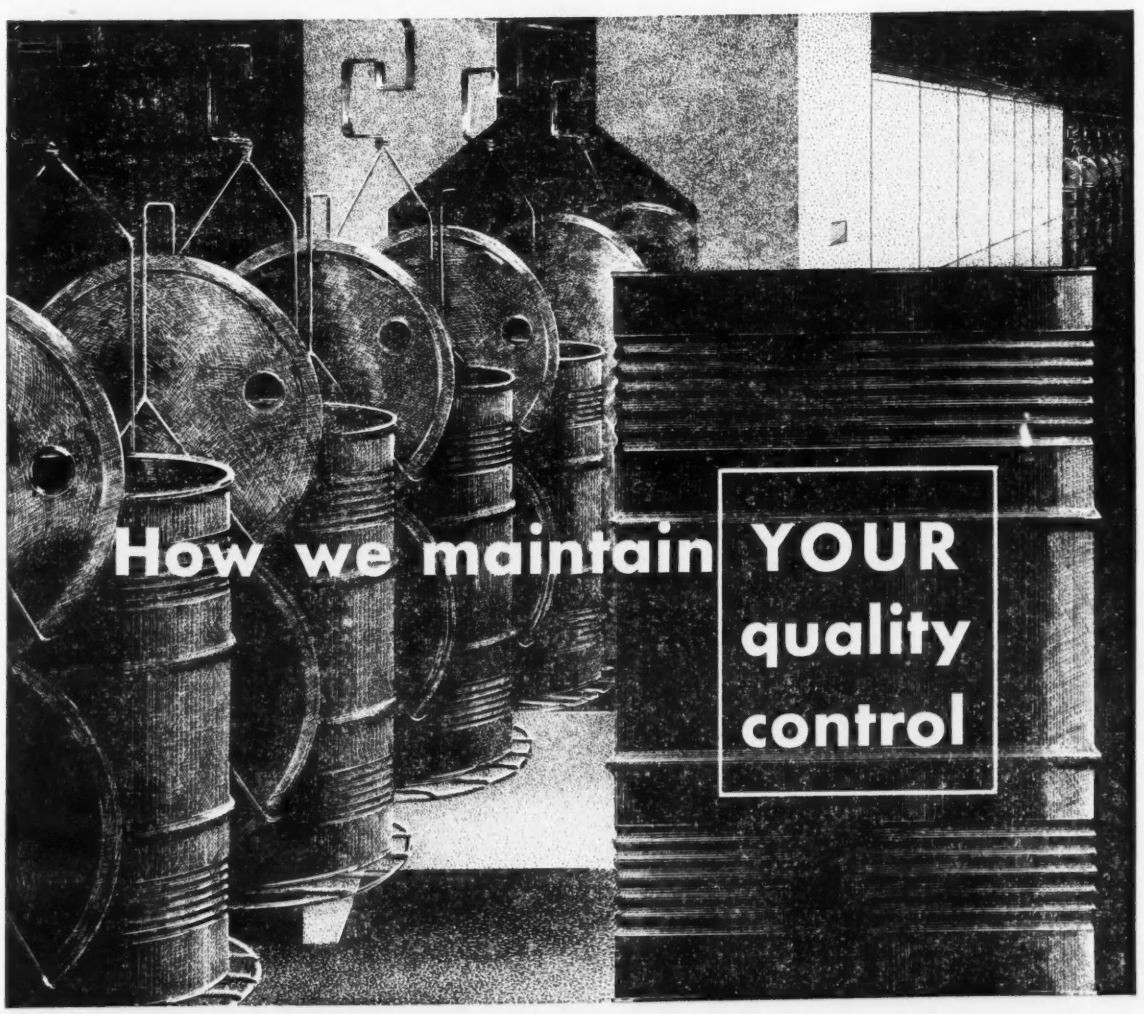
Drum prices for octyl phenol are 1c. higher.

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity, quality or in individual suppliers' views.)

Oil, abies siberica, cns	lb.	3.00	3.50
Almond, artif., bitter (see Benzaldehyde).			
nat., bitter, F.P.A., bots	lb.	3.00	3.75
NF, bots.	lb.	3.25	3.75
sweet, USP, dms., cns	lb.	1.15	—
Allspice (see Oil, pimento).			
Amyris, dms	lb.	1.30	—
Angelica root, bots	lb.	66.00	100.00
seed, bots	lb.	56.00	95.00
Aniline (see A)			
Anise, USP, dms	lb.	3.15	4.00
Apricot, kernel, USP, dms	lb.	.48	—
Avocado, cns.	lb.	3.25	—
Bay, NF, Puerto Rican, 50-55%, cns	lb.	1.90	2.75
55-60%, cns.	lb.	2.10	2.50
West Indian 50-55%, cns., dms.,	lb.	1.85	2.40
Bergamot, nat., NF, Italian, cns.	lb.	8.50	11.00
Birchtar, crude, cns	lb.	1.50	1.90
rectified, NF, cns	lb.	1.75	—
Bois de rose, Brazil, dms	lb.	3.55	3.75
Mexican (see Oil, lignaloe wood).			
Bone, dms., works	lb.	.65	.70
Cajeput, native, cns	lb.	1.75	2.10
redist., USP, cns	lb	2.25	3.00
Calamus, bots	lb	12.00	20.00
Camphor, sassafrassy, dms	lb.	.30	.45
white, dms	lb.	29	—
Cananga, native, cns	lb.	8.00	9.00
rectified, cns.	lb.	12.00	14.00
Caraway, NF, cns	lb.	3.65	5.00
Capsicum (see Capsicum oleoresin).			
Cardamom, NF, bots	lb.	36.00	45.00
Cassia, USP (see Oil, cinnamon, USP).			
Castor, blown, dms., c.l.	lb.	.2100-	—
l.c.l.	lb.	.2150-	—
dehydrated, bodied, dms., c.l	lb.	.2310-	—
l.c.l.	lb.	.2360-	—
tanks	lb.	.2160-	—
unbodied, dms., c.l.	lb.	.2160-	—
l.c.l	lb.	.2210-	—
tanks	lb.	.2010-	—
Hydrogenated, bgs., c.l., dlvd.	lb.	.21¾	—
l.c.l., dlvd.	lb.	.27½	—
No. 3, tech., dms., c.l.	lb.	.1625-	—
l.c.l.			—
tanks	lb.	.1475-	—
Oil, castor, No. 1, Brazilian, tanks	lb.	.15½-	—
USP, dms., c.l.	lb.	.1850-	—
l.c.l.	lb.	.1900-	—
tanks	lb.	.1700-	—
refd. and deodorized, dms., c.l.	lb.	.2075-	—
l.c.l.	lb.	.2125-	—
tanks		.1925-	—
sulfonated, 50%, dms., l.c.l.	lb.	.11½-	.12½
75%, dms., l.c.l.	lb.	.14½-	.15½
Cedarleaf, USP, XIII, cns., dms.	lb.	3.15	3.50
Cedarwood, cns., dms	lb.	.65	1.00
Celery seed, bots	lb.	12.50	20.00
Chamomile, blue, Hungarian, bots.	lb.	90.00	130.00
Chenopodium, NF, cns	lb.	3.45	3.50
Chinawood (see Oil, tung).			
Cinnamon, bark, bots	lb.	25.00	70.00
leaf, crude, dms	lb.	1.70	2.00
USP, cns., dms. (Cassia)	lb.	10.25	10.90
Citronella, Ceylon, cns., dms	lb.	1.00	1.70
Java, cns.	lb.	2.05	—
Java-type, cns.	lb.	2.15	—
Clove, bud, USP, cns., dms	lb.	2.65	—
leaf, crude, dms	lb.	1.20	1.50
Coconut, crude, tanks, N. Y.	lb.	.12⅜	—
Pac. Coast	lb.	.11¼	—
refd., Cochin type, dms., tax incl., l.c.l.	lb.	.19	—
deodorized, tax incl., dms., l.c.l.	lb.	.21½	—
Cod, Newfoundland, dms	lb.	.11½	Nom.
Codliver, USP, dms	gal.	1.45	1.55
Copaiba, cns	lb.	1.75	2.50
Coriander, USP, bots	lb.	13.00	15.00
Corn, crude, tanks, works	lb.	.15½-	—
foots (soapstock), acid 95%, tanks, N. Y.	lb.	.06⅛-	—
refd., salad, dms	lb.	.20½-	.20¾
tanks	lb.	.1910-	—
Oil, costus, bots	lb.	8.00	—
Cottonseed, crude, tanks, South East	lb.	.14¾-	—
Valley	lb.	.14½-	—
Texas	lb.	.14¼-	.14½
foots (soapstock), acid 95%, tanks, N. Y.	lb.	.04	—
refd., salad, dms	lb.	.19⅞-	.20⅛
tanks	lb.	.18⅜-	—
Creosote (see Creosote, coaltar)			
Cubeb, cns.	lb.	4.10	4.25
Cumin, bots., cns.	lb.	5.00	5.75
Cypress, bots.	lb.	5.30	—
Degras (see D).			
Dillseed, bots	lb	2.80	4.25
Dillweed, dom., bots., dms.	lb.	3.10	3.50
Dip (see D)			
Erigeron, cns	lb.	5.50	7.50
Eucalyptus, NF, rectified, 70-80%, drums	lb.	.72	1.05
80-90%, dms	lb.	.78	1.10
Fennel, sweet, USP, cns	lb.	2.80	—
Fir, Canada, cns	lb.	2.35	3.00
Fish, refd., alkali, dms	lb.	.1400-	.1450
kettle-bodied, dms.	lb.	.1630-	.1680
light-pressed, dms.	lb.	.1250-	.1300
tanks	lb.	.1100-	—
Fishliver, crude, for feeds or concentrating 4,000 to 12,000 A units per gram, dms., 1,000,000 units.		.08	.09
10,000 to 20,000 A units per gram, dms., 1,000,000 units.		.09	.10
25,000 to 35,000 A units per gram, dms., 1,000,000 units.		.09	.10
Oil, fishliver, crude, for feeds or concentrating, 40,000 to 55,000 A units per gram, dms. 1,000,000 units.		10½-	.11
100,000 A units per gram., dms 1,000,000 units.		.14	—
200,000 A units per gram., dms 1,000,000 units.		.15½-	—
500,000 A units per gram., dms 1,000,000 units.		.16	—

Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.

Fusel (see F).			
Garlic, pure, bots	oz.	4.75	9.50
Gaultheria (see Oil, wintergreen)			
Geranium, Algerian, cns	lb.	12.75	13.00
Bourbon, cns	lb.	13.25	14.00
Turkish (see Oil palmarosa)			
Ginger, dist., bots	lb.	17.85	19.00
Grapefruit dms.	lb.	1.80	3.25
Grease, No. 1, dms	lb.	.15¼	.16¼
extra, winter, strained, dms	lb.	.17¼	.18¼
prime, burning, dms	lb.	.18¾	.19¾
Guiacwood, cns	lb.	1.45	1.50
Hemlock, cns.	lb	2.10	2.50
Juniper berry, NF, VIII, bots	lb.	2.75	4.00
twice rectified, bots	lb	3.60	7.00
Tar, NF (see Juniper tar)			
Wood, tech., cns.	lb.	.38	.53
Lard (see Oil, grease).			
Laurel leaf, dms., cns	lb	9.75	12.50
Lavandin, dms., cns	lb.	2.35	2.85



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All surfaces of the drum body, head, and bottom are completely descaled, then purged with a strong alkali solution, removing all traces of dirt and grease. With the interior and exterior now immaculately clean, the drum is ready for a thorough coating with a special phosphate formula that means long-term freedom from rust. Each of these steps is vitally important to quality-controlled shipping. They mean that nothing will happen to your product during shipment or storage that could nullify the results of your own rigid quality control measures during manufacture.

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Oil, lavender, flower, USP, French, 35-37% ester, cns lb. 2.85 - 4.60
38-40% ester, cns lb. 8.50 - 9.50
40-42% ester, cns lb. 8.75 - —
spike, Spanish, cns lb 1.85 - 2.30
Lemon, USP, Calif., cns., dms lb. 4.65 - 6.00
Messina, cns lb. 5.50 - —
terpeneless, bots. lb.50.00 -85.00
Lemongrass, cns., dms lb. 2.00 - 2.10
Lignaloe wood, Mex., cns lb. 4.65 - —
Lime, dist., Mexican, cns lb. 3.00 - 3.25
West Indian, cs lb. 3.00 - 3.25
expressed, West Indian, cns lb. 6.00 - 8.00
terpeneless, bots. lb.29.50 -100.00
Linseed, raw, dms., c.l., N. Y. lb. .1870- —
l.c.l. lb. .1920- .1970
tanks (f.o.b. Minneapolis) lb. .1560- —
New York lb. .1685- —
tankwagon, New York lb. .1725- .1735
Boiled linseed oil, .006c per lb. higher.
Mace, dist cns., dms lb. 4.75 - —
Mandarin (see Oil, tangerine).
Menhaden, crude, new crop, tanks, works, Atlantic & Gulf lb. .08 - .08½
Mineral, white (see Oil, white mineral).
Mirbane (see Nitrobenzene).
Mustard seed, nat., dms lb. .17 - .17½
syn., bots lb. 1.60 - 1.85
Neatsfoot, 15° cold test, dms lb. .33 - .34
20° cold test, dms lb. .32 - .33
30° cold test, dms lb. .30 - .31

Oil, neroli, NF, French, bots lb.250.00 -310.00
Spanish, bots. lb.32.50 -85.00
Nutmeg, USP, dist., East Indian, cns., dms lb. 4.75 - —
West Indian, cns., dms lb. 4.65 - —
Ocotea cymbarum, dms lb. .55 - .58
Oiticica, liq., dms lb. .16¼ - .17
tanks lb. .15 - .15½
Oleo, extra, dms lb. .13¾ - .14
Olibanum, bots. lb. 5.50 - 7.65
extra fine, bots lb. 8.00 - 9.00
Olive, edible, Spanish, dms., duty paid gal. 3.65 - 3.75
Orange, sweet, dist., cns lb. .45 - .80
expressed, USP, Brazilian, cns., dms lb. No stocks.
Calif., cns., dms. lb. .55 - 1.25
Florida, cns., dms lb. .45 - .50
Messina, cns. lb 3.85 - 5.85
West Indian, cns., dms lb. 2.50 - 3.65
sesquiterpeneless, bots lb.65.00 -120.00
Origanum, Spanish, cns lb. 2.00 - —
Palm, clarif., dms lb. .13¾ - .14
Palmarosa, cns lb. 8.25 -10.00
Paraffin, pale, 100-110 vis., at 100 F. tanks, East Coast refy gal. .14 - —
Patchouli, dms. lb. 7.25 - —
Peach kernel, USP (see Oil apricot kernel).
Peanut, crude, tanks, f.o.b. mills. lb. .17⅜ - —
refd., dms. lb. .22½ - .23
tanks lb. .21⅛ - —
Pennyroyal, USP, imported, cns. lb. 2.75 - 3.50
Peppermint, nat., dms lb. 5.60 - 7.50

Oil, peppermint, redist., USP, dms. lb. 5.85 - 8.50
Persic, USP (see Oil, apricot kernel).
Petitgrain, South American, cns., dms lb. 3.40
Pimento, berry, NF, dms lb. 4.50 - 5.00
leaf, cns. lb. 2.65 - 3.10
Pine, dest.-dist., dms., l.c.l., works. lb. .12¼ - —
ex-whse. lb. .14¼ - —
steam-dist.,, dms., ex whse. N.Y.C lb. .163 - —
Pineneedle, Siberian (see Oil, abies siberica).
Rapeseed, tankcars lb. .16¼ - —
Red (see Acid, oleic).
Rice, bran, clarif., dms., l.c.l. lb. .16½ - —
tanks, dlvd. E lb. .14 - —
Rose, nat., Bulgarian, bots oz.48.00 -54.00
Rosemary, Spanish, USP, cns., dms lb. .60 - 1.00
tech., cns., dms lb. .50 - .70
Rue, bots. lb. 2.00 - 2.50
Safflower, dms., c.l., Atl. coast lb. .1735- —
tanks, same basis lb. .1585- —
Sage, clary, bots lb.18.75 -19.00
Dalmatian, cns. lb. 4.50 - 6.00
Spanish, cns lb. 1.30 - 1.45
Sandalwood, NF, cns lb.15.50 -16.10
Sardine, crude, tanks, Pac. coast. lb. .08½ - .09
Sassafras, artif., dms lb. .53 - .70
nat., dom., USP, dms lb. 1.45 - 2.10
imp., Brazilian (see Oil ocotea cymbarum).
Savin, cns lb. 2.75 - —
Savory, cns lb. 4.25 - —
Sesame, refd., dms lb. .36 - .37
Shingle stain, tar distillate, dms., c.l., works gal. .35 - —
l.c.l., works gal. .44 - —
tanks, works gal. .23 - —
Snakeroot, Canada, cns lb.27.50 -31.00
Soybean, crude, tanks, Decatur. lb. .14¾ - —

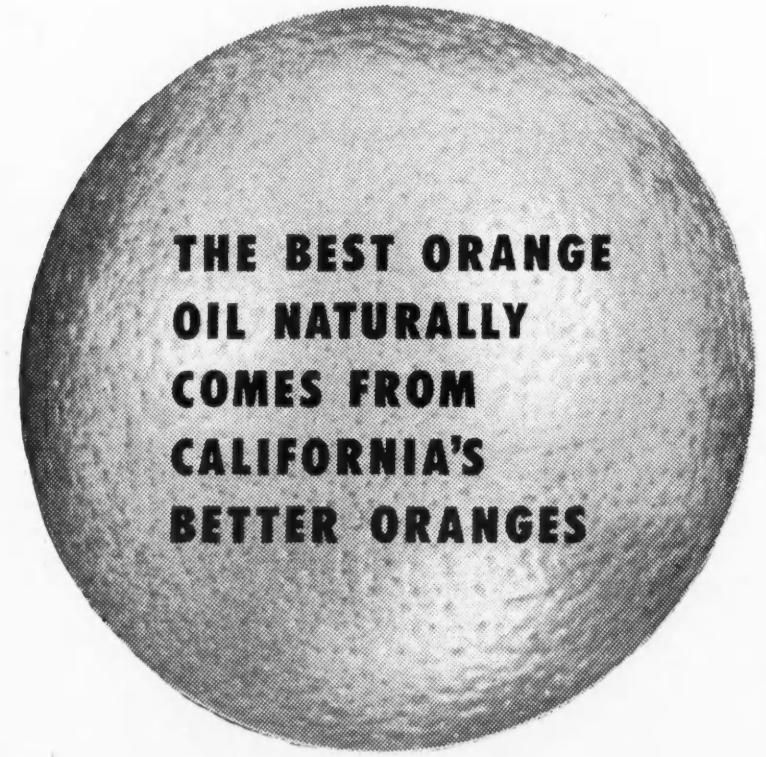
Oil, soybean, foots (soapstocks), acid, 95% tanks, N. Y. lb. .07 - —
refd., alkali, dms lb. .18¾ - .19
tanks lb. .17¼ - —
clarified, dms. lb. .18¼ - .18¾
tanks lb. .16¾ - —
salad, dms. lb. .19¼ - .19⅝
tanks lb. .17¾ - —
Spearmint, USP, dms lb. 4.75 - 5.60
Sperm, bleached winter, 45° dms. lb. .1775- .1825
tankcars lb. .1600- —
nat., winter, 45°, dms lb. .1675- .1725
tankcars lb. .1500- —
Spruce, cns., dms lb. 2.10 - 2.75
Sweet birch, USP, Northern, cns. lb. 4.25 - 9.50
Southern, cns lb. 2.50 - 3.00
Tall, crude, dms., c.l., works lb. .03½ - —
tanks, works lb. .02½ - —
dist., dms., c.l., works lb. .07½ - —
l.c.l., works lb. .07¾ - —
tanks, works lb. .06¼ - —
refd., dms., c.l., works lb. .06½ - .06¾
l.c.l., works lb. .06¾ - .07¾
tanks, works lb. .05¼ - .05¾
Tallow, acidless, dms lb. .13½ - .15
Tangerine, Floridian, dms lb. 2.00 - 2.80
Tansy, dms lb. 7.50 - 8.40
Tar acid (see T's).
Pine, coml., dms., c.l., works lb. .0561- —
l.c.l., works lb. .0634- —
whse lb. .0745- —
tanks, works lb. .046 - —
rectified, NF, dms., incl. l.c.l., works, South gal. 1.05 - —
ex whse., N. Y. C gal. 1.15 - —
refined, dms., works, l.c.l., incl. gal. .92 - —
N. Y. whse., l.c.l. gal. 1.02 - —
Theobroma (see Cocoa butter).
Thyme, NF, red, cns., dms lb. 1.70 - 3.75
white, cns lb. 1.95 - 4.00
tech., white, cns lb. .40 - 1.85
Tung, dms., c.l., N. Y. lb. .27¼ - —
l.c.l., same basis lb. .27½ - .28
tanks, N. Y. lb. .25¾ - —
domestic mills lb. .25¾ - —
Turkey red (see Oil, castor, sulfonated).
Turpentine, NF, cns., dms. lb. .28 - .45
Vetiver, Bourbon, cns. lb.13.00 -17.00
Haitian, cns lb. 9.60 -11.00
Java, cns lb.18.50 -20.00
Wheat germ, 5-gal. dms gal.11.20 - —
White mineral, tech., 50-65 vis., non-ret. dms. c.l., f.o.b. N. Y. gal. .51½ - .54⅛
65-75 vis., non-ret., dms., c.l., same basis gal. .52½ - .55
l.c.l., same basis gal. .57½ - .58⅛
80-90 vis., non-ret., dms., c.l., same basis gal. .53½ - .56⅛
l.c.l., same basis gal. .58½ - .59⅛
135-138 vis., non-ret. dms., c.l., same basis gal. .59½ - .62⅛
l.c.l., same basis gal. .64⅛ - .65⅛
145-155 vis., non-ret. dms., c.l., same basis gal. .66 - .69⅛
l.c.l., same basis gal. .71 - .71⅛
175-185 vis., non-ret. dms., c.l., same basis gal. .69½ - .73
l.c.l., same basis gal. .74½ - .75
USP, 200-210 vis., non-ret., dms., c.l., same basis gal. .73½ - .75
l.c.l., same basis gal. .77½ - .78
345-355 vis., non-ret. dms., c.l., same basis gal. .77 - .80
l.c.l., same basis gal. .83 - .85
Wintergreen, USP, nat., Northern, cns lb. 6.35 -10.30
Southern cns lb. 3.20 -19.50
Syn. (see Methyl salicylate).
Wood (see Oil, tung).
Wormseed (see Oil, Chenopodium, NF).
Wormwood, cns. lb 5.00 - 6.85
Ylang-ylang, Bourbon, bots lb.17.00 -30.00
extra bots lb.28.00 -40.00
Madagascar bots lb No stocks
Oleostearine, bbls. lb. .11 - .11½
Opium, USP, cns oz.19.20 -19.45
gran., USP, cns oz.21.65 -21.90
powd. USP, cns oz.21.65 -21.90
Orange cadmium-selenide lithopone, light shade, bbls., frt. alld. E. of Rockies lb. 1.80 - —
Deep shade, bbls lb. 2.00 - —
Cadmium-Mercury lithopone, deep shade, bbls lb. 1.78 - —
Chrome, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., include Davenport, Tenn., and E of Minneapolis, Rock Islaand, St. Louis, St. Paul lb. .33 - .33½

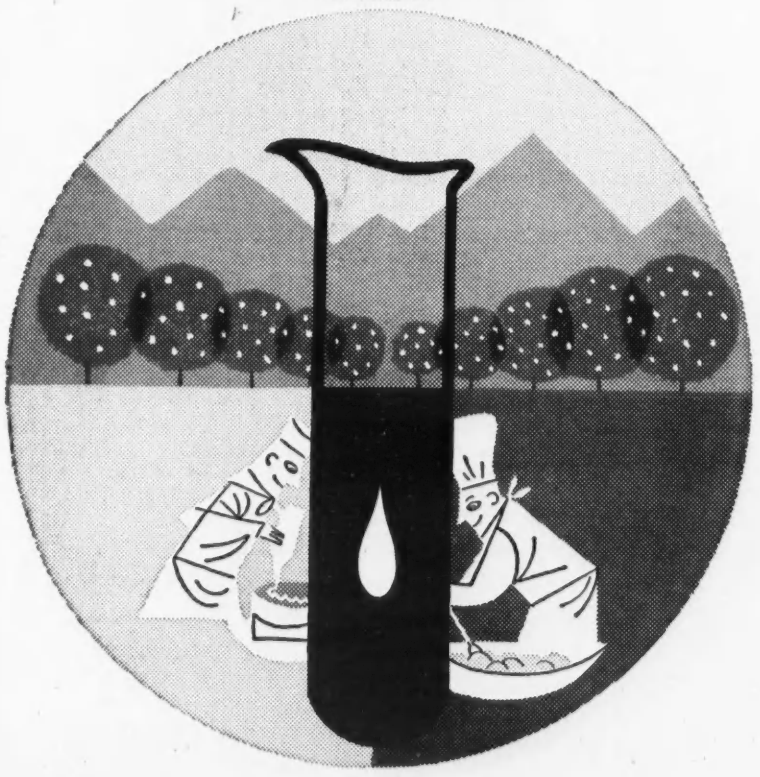
Chrome orange prices are ½c. higher, dlvd. Ala., Fla., Ga., La. (Shreveport); 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City. Wichita prices are equalized with Chicago.

Dinitroaniline toner lb. 1.30 - —
Mineral, American, bbls., l.c.l., works lb. .2160- —
Molybdated, bbls lb. .46 - .46⅛
o-Nitroaniline toner, kgs lb. 1.15 - —
Peel, bitter, Haitian, bls lb. .14 - .16
sweet bls lb. .16 - .18
Orris root, Florentine, bls lb. .45 - .50
powd., bbls., bxs. lb. .50 - .53
Verona, bls. lb. .35 - .40
powd., bbls., bxs. lb. .40 - .45
Orthoaminobiphenyl (see o-Aminobiphenyl).
Orthoanisidin (see o-Anisidine).
Orthochloroanilin (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitrobiphenyl (see o-Nitrobiphenyl).
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthopehenetidin (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol)
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine).
Osage, orange, cryst., No. 1, bbls. l.c.l lb. .40 - —
extract, liq., No. 1, bbls., l.c.l., lb. .19 - —
Ouabain, USP, bots gram. 3.00 - 4.00
Oxyquinolin sulfate, cns., 100-lb. lots, works lb.4.75 - 5.00
smaller lots, works lb. 4.92 - 5.17

P

Papain, USP, African, bots lb. 3.50 - 4.00
Ceylon lb. 3.00 - 3.50
Papaverine, nat. or syn. hydrochloride, USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
smaller lots oz. 5.05 - 5.20
Sulfate, cns. oz. 7.10 - 7.35





Flavor is the most important factor in your finished product. Better *orange* flavor naturally comes from *better oranges*, and all tests prove California oranges are richer in flavor strength, more intense in aromatic constituents.

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Exchange®

Sunkist Growers

Products Department • Ontario, California

Produced by
The Exchange Orange Products Co.
Ontario, California

Distributed in the U.S. by
Dodge & Olcott, Inc., 180 Varick St. New York 14, N.Y.
Fritzsche Brothers, Inc., 76 Ninth Ave. New York 11, N.Y.

Paprika, Roumanian, bgs..... lb. .28 - —
Spanish, bgs..... lb. .35 - .36
Yugoslavian, bgs..... lb. .36 - .37
Para-aminophenol (see p-Aminophenol).
Para-anisidin (see p-Anisidine).
Parachloranilin (see p-Chloroaniline).
Parachloro-orthonitroanilin (see 4-Chloro-2 nitroaniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude scale, white, 123°-127 F, ASTM, solid, c.l., refy lb. .0750- —
fully refd., 122°-124°F., ASTM, c.l., refy lb. .0905- —
125°-127°F. ASTM, slabs loose, c.l., refy lb. .0905- —
130°-132°F., ASTM, slabs, loose, c.l., refy lb. .0905- —
132°-134°, ASTM, c.l., refy lb. .0905- —
135°-137 F., ASTM, slabs, loose, c.l., refy lb. .0905- —
Prices for paraffin in bags and ctns., c.l. 7-10c per lb. higher; 1,000 to 9,999 lbs., 2.7c. per lb. higher and under 1,000 lbs. 3.7c. per lb higher
AMP temperatures are an arbitrary 3°F higher than ASTM.
Paraformaldehyde, 91% flake, bgs., c.l., frt. alld lb. .1075- —
l.c.l., frt. alld lb. .1275- .1375
powd., bgs., c.l., frt. alld lb. .13½- —
l.c.l., frt. alld lb. .17 - —
USP X, fib. dms., c.l. lb. .183 - —
1,000-lb. lots lb. .193 - —
smaller lots lb. .203 - —
Paraldehyde, tech., 98%, 55-gal. dms., c.l. works lb. .13½- —
l.c.l., works lb. .14½- —
tanks, works lb. .11½- —
Paranitroanilin (see p-Nitroalinine).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidin (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-arylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, spray powder, 15% dealers, dms., bgs., frt. alld lb. .50 - .53
tech. dms. c.l. t.l. works lb. 1.3395- —
l.c.l., works lb. 1.51 - —
Paratoluenesulphonamide (see p-Toluenesulfonamide).
Paris green, dealer, dms., c.l., frt. alld lb. .44 - .47
l.c.l., same basis lb. .45 - .48
Passion flower herb, bls. lb. .20 - .21
Peanut meal, 45%, old process, bgs., mills ton 52.50 - —
Pectin, citrus, NF, powd., bbls lb. 2.05 - 2.06
tech., powd., bbls lb. 1.35 - —
imported, Danish, ex whse lb. 1.28 - —
Penicillin, crystalline, potassium, sterile, bulk, 1,000,000 units. .03½- .04
Procaine bulk 1,000,000 units. .03½- .04
Sodium, sterile, bulk, 1,000,000 units. .03½- .04
Pentachlorophenol, dms., c.l., t.l., works, frt. equald lb. .21 - —
l.c.l., same basis lb. .22½- .29
Pentaerythritol, tech., bgs., c.l., works lb. .32 - —
l.c.l., works lb. .33 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .13 - —
Pepper, black, Malabar, spot, bgs lb. .33 - —
red, Gongar, spot, bgs lb. No prices.
Japanese bontaka, bgs lb. .33 .34
birdseyes, bgs., new crop lb. No prices.
Mombasa, bgs., shipt lb. .65 - —
Nigerian, bgs. lb. .29½- —
Turkish, bgs. lb. .28 - —
white, bgs lb. .44 - .43
Peppermint leaves, USP, dom., bls., dms lb. .70 - .75
imp., bls. lb. 1.10 - —
Perchloroethylene, dms., c.l., or truckloads, dlvd. E lb. .12½- —
l.c.l., dlvd. E lb. .14 - —
tank trucks, 1,000 gal., min. dlvd. E lb. .11½- —
tanks, dlvd E lb. .11 - —
dlvd. W. lb. .11½- —
Peru balsam, dms. lb. 1.50 - 1.75
Petrolatum, amber, dms., c.l., refy. lb. .05¾- .06¼
l.c.l., dlvd lb. .07⅜- .07⅝
tanks, refy lb. .03⅞- .04¾
cream, dms., c.l., refy lb. .06¾- .07¾
l.c.l., dlvd. lb. .09⅛- .09⅜
tanks, refy. lb. .05 - .06¼
extra amber, dms., c.l., refy lb. .05⅞- .06⅛
l.c.l., dlvd lb. .07⅝- .07⅞
tanks, refy lb. .04¼- .05¼
USP, white, lily, dms., c.l., refy. lb. .07¼- .07¾
l.c.l., dlvd lb. .09½- .09¾
tanks, refy lb. .05½- .06⅜
snow, dms., c.l., refy lb. .08⅛- .08¾
l.c.l., dlvd lb. .10 - .10¼
tanks, refy lb. .06 - .06½
soft, dms., c.l., refy lb. .07⅝- .08⅜
l.c.l., dlvd lb. .09¼- .09⅜
tanks, refy. lb. .05⅞- .06½
yellow, soft, dms., c.l., refy lb. .05⅞- .06⅜
l.c.l., dlvd lb. .07½- .07¾
tanks, refy lb. .04⅛- .06⅛
Petroleum, lacquer diluent, 150°-240°F, b.r., tanks, West Coast, ex tax, Los Angeles gal. .169 - .204
East coast, N. J., N. Y. gal. .19 - —
Group 3, benzol-type gal. .14125- .14625
toluol-type gal. .13125- .13375
Mineral spirits, reg., tanks, California, ex tax, San Francisco. gal. .164 - —
East coast, N. J., N. Y. gal. .17 - —
Group 3 gal. .11875- —
tankwagon, Boston gal. .19 - —
Buffalo gal. .195 - —
Chicago gal. .279 - —
Cleveland gal. .22 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Providence gal. .195 - —
odorless, tanks, refy., Watson, Cal. gal. .243 - —
Borger, Tex gal. .24 - —
Houston, Tex gal. .24 - —
Wood River, Ill. gal. .2625- —
dlvd. N. J gal. .32 - —
dlvd. N. Y. gal. .33½- —
tankwagon, N. J., dlvd gal. .36 - —
N. Y., dlvd gal. .37 - —
Naphtha, cleaners, tanks, East Coast, N. J. and N. Y. gal. .17 - —
Group 3 gal. .12875- —
tankwagon, Newark gal. .16 - —
New York gal. .16 - —
Philadelphia gal. .185 - —
High solvency (see Petroleum solvent, partial aromatic).
Petroleum, naphtha, VM&P, 225°-300°F, b.r., tanks, West Coast, Los Angeles gal. .169 - —
Portland, Ore. gal. .175 - —
San Francisco gal. .174 - —
Seattle, Wash gal. .175 - —
225°-300°F, b.r., tanks, East Coast, N. J., N. Y. gal. .18 - —
Group 3 gal. .12875- —
tankwagon, Boston gal. .205 - —
Chicago gal. .289 - —
Cleveland gal. .23 - —
Newark gal. .195 - —
New York gal. .195 - —
Philadelphia gal. .20 - —
Pittsburgh gal. .19 - —
Solvent, partial aromatic, tanks, 205°-282° F., b.r., 41°C., m.a.p., N. Y., N. J gal. .245 - —
212°-278°F b.r., 43°C. m.a.p., N. J gal. .26 - —
212°-284°F b.r., 19°C. m.a.p., N. J gal. .29 - —
224°-280°F, b.r., 48°C. m.p.a., Houston gal. .215 - —
273°-361°F b.r., 29°C. m.a.p., N. J gal. .29 - —
282°-325°F b.r., 41.5°C. m.a.p. Houston gal. .25 - —
287°386°F., b.r., 31°C., m.a.p., N. J. gal. .29 - —
310°-344°F., b.r., 13.5°C. m.a.p., Texas City gal. .33 - —
310°-348°, b.r., 17°C., m.a.p., N. Y., N. J gal. .35 - —
310°-360°F. b.r., 16°C. m.a.p., N. Y., N. J. gal. .33 - —
324°-349°F, 37°C., m.a.p., Houston gal. .33 - —
341°-390°F., b.r., 35°C., m.a.p., N. J gal. .27 - —
352°-413°F, b.r., 30°C. m.a.p., Houston gal. .33 - —
Petroleum solvent, partial aromatic, tanks, 358°-401°F., b.r. 25°C, m.a.p., N. Y., N. J. gal. .39 - —
364°-404°F. b.r., 19°C. m.a.p., N. Y., N. J. gal. .425 - —
367°-418°F. b.r., 19.6°C. m.a.p., N. Y., N. J. gal. .33 - —
rubber, tanks, Cal., ex tax, San Francisco gal. .173 - —
East Coast, N. J., N. Y., gal. .18 - —
Group 3 gal. .12875- —
Stoddard, tanks, East Coast, N. J., N. Y. gal. .17 - —
Group 3 gal. .12375- —
Pennsylvania, western gal. .15 - —
Boston gal. .19 - —
Chicago gal. .289 - —
Cleveland gal. .22 - —
Los Angeles, ex tax gal. .194 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfonic content, non-ret. dms., c.l., works lb. .16 - —
l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., works lb 1.00 - —
p-Phenetidine, dms., works lb. 1.00 - —
Phenobarbital, USP, dms., 100-lb. lots lb. 3.50 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 3.50 - —
Phenol, 90-92% (cresol 8-10%), non-ret. dms. c.l. frt alld E. of Rockies lb. .16¾- —
l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .15 - —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .16¼ —
l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14½- —
39°C or above, tar distilled, non-ret. dms., c.l., same basis. lb. .18¼ - —
l.c.l., same basis lb. .19 - —
tanks same basis lb. .16½- —
USP, syn., dms., c.l., frt. alld lb. .18¾- —
1,000-lb lots or more, same basis lb. .19½ - —
less than 1,000-lb lots, same basis lb. .20½ - —
tanks, same basis lb. .17 - —
Phenolphthalein USP or yellow, bbls., dms. 2,000-lb lots. lb 1.10 - —
smaller lots lb 1.12 - 1.17
Phenothiazine NF fib dms. c.l. frt. adjusted lb. .39 - —
over 2,100 lbs., same basis lb. .41 - —
less than 2,100 lbs. same basis. lb. .43 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Salicylate (see Salol.)

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or THE WEAR in VINYLS

is better when you manufacture with Enjay Oxo Alcohols

Much of today's Vinyl rainwear is fabricated with plasticizers made from Enjay Isooctyl Alcohol . . . and an increasing number of the new detergents are prepared with Enjay Tridecyl Alcohol.

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HIGHER OXO ALCOHOLS (Isooctyl Alcohol, Decyl Alcohol, Tridecyl Alcohol); LOWER ALCOHOLS (Isopropyl Alcohol, Ethyl Alcohol, Secondary Butyl Alcohol); and a varied line of OLEFINS AND DIOLEFINS, AROMATICS, KETONES AND SOLVENTS.

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Phenylacetaldehyde, soln., 50%, bots lb 2.40 2.70
100%, bots lb 4.00 4.65
Phenylacetamide, 125-lb. dms. works lb 1.10 —
smaller dms., works lb 1.15 1.10
dl-Phenylalanine, dms., works lb 27.00 37.50
1-Phenyl-3-carnethoxy pyrazolone-5, 250-lb fib dms., dlvd. E lb 3.60 - —
smaller dms. dlvd E lb 4.00 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb .40½ - —
l.c.l., dlvd. E lb .41½ - —
tanks, dlvd E lb .38½ - —
m-Phenylenediamine dms. frt alld. lb .95 - —
o-Phenylenediamine, coml., 100 to 1,000 lbs., fib dms., works lb 1.70 - 1.80
p-Phenylenediamine, tech., refd., dms., works lb 1.42 - —
Phenylethanolamine, d m s., c.l., works lb .75½ - —
l.c.l., same basis lb .76 - —
Phenylethyl acetate, bots lb 1.30 - —
b-Phenylethylamine, dms., 1,000-lb. lots, works lb 1.10 - —
smaller lots, works lb 1.15 1.40
Phenylhydrazine base, CP, bots lb 3.00 3.07
Hydrochloride, coml., kgs., works, lb 1.75 - —
purif., bots., works lb 5.17 - —
1-Phenyl-3-methyl pyrazolone-5, 250-lb lots, dlvd. E lb 1.80 - —
smaller lots, dlvd lb 2.10 - —
Phenylethylphenyl acetate, bots lb 3.95 - 4.40
o-Phenylphenol, dms., l.c.l., works, lb .42 - .44
p-Phenylphenol, bgs., c.l., works lb .35 - —
l.c.l., works lb .39½ - —
Phloroglucinol, coml., fib. dms., works lb 6.40 - —
C.P., bots., works lb 17.75 - —
tech., fib drums., works lb 10.45 - —
Phosphate defluorinated (see under D)
Rock, Curacao, Atlantic ports, New Orleans ton 45.00 - —
Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines long-ton. 4.81 - 4.82
70-68%, b.p.l., c.l., same basis long-ton. 5.21 - 5.22
72-70%, b.p.l., c.l., same basis long-ton. 5.87 - —
75-74%, b.p.l., c.l., same basis long-ton. 6.87 - —
78-76%, b.p.l., c.l., same basis long-ton. 7.87 - —

The Florida prices (above) are based on fuel oil at $2.47 per bbl. and labor at $1.39. Recent labor advance currently absorbed.

Phosphorus, amorph., red, dms., t.l., works lb .43 - —
smaller lots, works lb .44 - .45
white (yellow), solid, dms., c.l., works, frt equald lb .20 .20½
l.c.l., works, frt. equald. lb .21½ - —
tanks, works, frt. equald. lb .19 - —
Oxychloride, dms., c.l., works lb .14 - —
l.c.l. works lb .15 - —
tanks, works lb .12½ - —
Pentasulfide, solid, dms., c.l., works lb .11½ - —
l.c.l., works lb .12½ - —
Pentoxide, dms., c.l. works lb .13½ - —
l.c.l. works lb .16½ - —
Sesquisulfide, tins, cs., works lb .29 - —
export, dms lb .31 .30
Trichloride, dms., c.l., works lb .14 - —
l.c.l. works lb .15 - —
tankcars, works lb .12½ - —
Phthalic anhydride, bgs, c.l., works, frt equald lb .20 - —
l.c.l. same basis lb .21 - —
tanks, same basis lb .19½ - —
Phthalimide, 97½-98%, dms., frt. alld lb .65 - —
Phthalylsulfacetamide, 1,000-lb. lots or more lb 5.00 - —
a-Picoline, ref. dms., c.l., works, frt. equald lb .43 - .43½
l.c.l. works, frt equald lb .44 -
tanks, same basis lb .415 .422
b,g-Picoline, 5°C, dms., c.l., works, lb .32½ - —
l.c.l. works lb .33 - —
g-Picoline 96%, dms., works lb 2.00 - —
Pilocarpine hydrochloride, USP, bots oz. 4.75 - 5.25
Nitrate, USP, bots., vials oz. 4.05 - 4.75
Pimento, Jamaican, bgs lb .83 - .86
Mexican, bgs. lb .64 - .65
Pink root, bls lb 3.00 3.25
d-Piperazine hexahydrate, French Codex bots kilo 8.00 8.50
Piperidine dist., dms, frt. equald. lb 2.60 2.70
Piperonyl butoxide, dms, dlvd E lb 4.50 5.05
Cyclonene, ums., dlvd. E lb 3.70 4.25
Pitch, coaltar, 150°-170°F. m.p., tanks, works ton 37.00 - —
Cottonseed, raw, dms., works lb .02¼ .03
Linseed, dms lb .06 Nom.
Marine, dms. lb .04¼ .05
Petroleum (see Asphalt, petroleum)
Soybean, dms., works lb .05 Nom.
Tall, dms., works lb .03¼ .04½
Plaster of Paris (see Gypsum).
Platinum, metal, works oz. 97.00 -107.00
Pleurisy root, bls lb .45 - .50
Podophyllum resin, NF, dms lb. 15.60 - —
Poke root, bls lb .19 - .22
Polymyxin, bulk, bots., dms, 50 billion units or more, 1,000,000 units. .52 - —
25-50 billion units 1,000,000 units. .54 - —
1-25 billion units 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms, 20,000 lb lots, works lb .41 - —
10,000-20,000-lb lots, works, lb .43 - —
smaller lots, works lb .46 .48
tristearate, dms., 20,000-lb. lots, 10,000-20,000 lb lots works, works lb .41 - —
lb .43 -
smaller lots, works lb .46 .48
Poppy seed, Argentine, bgs lb .21 - —
Dutch, bgs. lb .23 - —
Iranian, bgs. lb .15 - —
Polish, bgs. lb .22 - —
Turkish, bgs. lb No prices.
Potash caustic, reg. flake, 88-92% dms., c.l., works 100 lbs. 9.15 - —
l.c.l., works 100 lbs. 10.20 - —
liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs. 5.05 - —
tanks, same basis 100 lbs. 3.70 - —
solid, 88-92%, dms., c.l., works 100 lbs. 8.70 - —
l.c.l., works 100 lbs. 9.75 - —
Potassium acetate, NF, dms lb. .31 - .36
Bicarbonate, USP, gran., dms lb. .22 - —
powd. dms lb. .24 - —
Bichromate, bgs., c.l., works lb. .16½ - —
l.c.l., works lb. .17 - —
Potassium bichromate in dms ¾c. higher.
Bitartrate, NF, dom., gran. or powd., bbls., 5,000 lbs., 1 ship't. lb. .38½ - —
dms., c.l. lb. .38 - —
smaller lots lb. .39 - .42
Imp, kgs. lb. .29 - —
Bromate, dms., 1,000 lbs. or more, lb. .50 - —
25-200-lb. lots lb. .52 - .62
Bromide, USP, gran., bbls., kgs. lb. .35 - .36
Carbonate, NF, gran., bbls., dms, lb. .20 - —
powd., bbls., dms lb. .21 - .22
tech., calcined, bbls., c.l., works, 100 lbs. 9.00 - —
l.c.l., same basis 100 lbs. 10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 8.45 - —
Chlorate, cryst., dms., c.l., works, lb. .10¼ - —
l.c.l., works lb. .10½ - .11½
powd., dms., c.l., works lb. .10¾ -
l.c.l., works lb. .11 - .12
NF, gran., 25-lb metal dms lb. .35 —
Chloride, agricultural (see Potassium muriate).
indust., 99.9% KCl, bulk, c.l., works ton. 28.00 - —
bgs., c.l., works ton. 32.25 - —
99.3% KCl, bulk, c.l., works, ton. 26.00 - —
bgs., c.l., works ton. 30.40 - —
USP, cryst., dms lb. .21 - .23
gran., dms lb. .15 - .17
powd., dms lb. .24 - .26
Chromate, tech., bgs lb. .50 - .50½
Citrate, USP, gran, dms lb. .41 - —
powd., dms lb. .40½ - .41½
Cyanide, dms., 20,000-lb. lots or more, works lb. .45 - —
2,000-19,999-lb lots, works lb. .455 - —
smaller lots, works lb. .465 —
Dichromate (see Potassium bichromate)
Ferricyanide, dms., ton lots lb. .50 - —
Ferrocyanide, bgs., ton lots lb. .22½ - —
smaller lots lb. .23 - —
Fluoborate, fib. dms., c.l., works, lb. .30 - —
c.l., works lb. .31 - —
Fluoride, dms., works lb. .37 - .38
Gluconate, dms. lb. 1.60 - —
Guaiacolsulfonate, NF, dms. lb. 2.10 - 2.30
Hydroxide, tech. (see Potash caustic).
USP, pellets 100-lb. dms, 1 to 100-dm lots lb. 28½ 32
Hypophosphite, NF, fib. dms., ton lots or less lb. 1.00 1.03
Iodide, dms. lb. 1.90 1.95
Manure salt, 22% K_2O, base price, unit-ton. .17 .1765
July forward unit-ton. .38 —
Metabisulfite, gran, dms lb. .20 .21
powd. dms lb. .25 —
Muriate, 59-63% K O bulk, c.l., works, base price unit-ton. .36 - —
July forward unit-on. .38 - —
59-63% K_2O_4, bgs, c.l., works, base price ton. 26.00 - —
July forward ton. 27.20 - —
Nitrate, cryst., bbls., 20-ton lots, 100 lbs. 14.40 —
smaller lots 100 lbs. 14.65 - 14.90
gran., bbls., 20-ton lots. 100 lbs. 9.75 —
smaller lots 100 lbs. 11.10 - 11.50
powd., bbls., 20-ton lots. 100 lbs. 10.75 —
smaller lots 100 lbs. 12.00 - 12.50
USP, gran., dms lb 18 —
Potassium nitrate in bags 50c. per 100 lbs. less in kegs $1 more
Oxalate, neutral, tech., fine gran., bbls., dms lb. .30 - .32
Pentaborate, gran., bgs., c.l., works ton. 191.50 - —
dms, ton lots, ex whs ton. 198.00 - —
smaller lots, ex whse ton. 302.50 - —
Powdered potassium pentaborate $10.25 per ton higher.
Perchlorate, dms., c.l., works lb. .17½ - —
l.c.l., works lb. .18 - .19
Permanganate, coml., kgs., works, lb. .24½ - .27½
USP, dms., works lb. .27¼ - .29
Persulfate, dms., 5-ton lots, works, lb. .18 - —
1-ton lots, works lb. .20 - —
Phosphate, tetrabasic, bbls., works, lb. .16½ - .18½
Prussiate, red (see Potassium Ferricyanide).
yellow (see Potassium Ferrocyanide).
Silicate, glass, bgs., c.l., works 100-lbs. 17.00 -17.30
l.c.l., works 100-lbs. 17.80 —
soln, clarif., 29° Be, 1:2.5, dms., c.l., works 100-lbs. 5.80 - —
l.c.l., 5 dms. or more works 100-lbs. 6.55 - 6.95
tanks, works 100-lbs. 5.45 - —
electrical grade, 29° Be, 1:2.0 dms., c.l., works 100 lbs. 6.50 - —
l.c.l., 5 cms. or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 6.45 - —
l.c.l., 5 dms. or more works 100 lbs. 7.20 - 7.60
Silicofluoride, bgs., works lb. .09½ - .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.
Stannate, dms., frt. alld. E lb. .769 - .775
Sulfate, agricultural 50% K_2O, bulk, works, base price, unit-ton. .64 - —
July forward unit-ton. .67 - —
NF VII cryst., dms lb. .31 - .33
gran. dms lb. 18½ - —
powder dms lb. 26½ .17
Sulfocyanate, NF, cryst. (see Potassium thiocyanate).
Thiocyanate, NF, cryst., dms lb. .84 .94
tech., works lb 77 79
Titanate, etns., c.l., works lb. .14 - —
5-ton lots, works lb. .14½ - —
1-ton lot or less, works lb. .14¾ - —
Toluene sulfonate, dms., c.l. or tl., works lb. .42 - —
l.c.l., works lb. .46 - —
Potassium-magnesium sulfate, bulk, works, basis 40% K_2SO_4, 18% MgO, b.se price ton. 13.45 - —
July forward ton. 14.90 - —
Potassium-sodium tartrate, NF, gran., powd., dms., c.l lb. .40½ - —
5,000-lb. lots lb. .41 - —
smaller lots lb. .41½ .47
Potassium-titanium fluoride, fib. dms, works lb. .39 - .40
Potassium-zirconium fluoride, fib. dms, c.l., works lb. .50 - —
l.c.l., works lb. .52½ .55
Pregnenolone, bots. gram. .45 - —
Acetate, bots. gram. .40 - —
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld lb. 2.90 - —
100-lb. lots lb. 3.00 - 3.60
Progesterone, USP, bots., 100 gram lots gram .50 - —
Acetate, bots. gram .70 - —
Propane, indust., tanks, group 3, gal. .04½ - —
N. Y. Harbor gal. .09 - —
n-Propyl acetate, dms., c.l., dlvd. lb. .12¾ - —
l.c.l., dlvd lb. .13¾ - —
tanks, dlvd lb. .1075 - —
Gallate, dms., 100 to 2,000-lb. lots, works lb. 3.90 - 4.40
p-Hydroxybenzoate, USP, dms lb. 2.30 - 2.40
Propyl thiouracil, bots., 50-kilo lots or more kilo. 55.00 - —
smaller lots kilo. 55.10 - 55.30
Prices in West 1c. higher dlvd. on same basis.
Propylene dichloride, dms., c.l., dlvd. E lb. .0825 - —
l.c.l., same basis lb. .095 - —
tanks, same basis lb. .07 - —
Glycol, indust., dms., c.l., dlvd. E lb. .15½ - —
l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .13½ - —
USP, dms., c.l., dlvd. E lb. .17½ - —
l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .15½ - —
Methyl ether, dms., c.l., dlvd lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½ - —
Oxide, dms., c.l., dlvd. E lb. .17½ - —
l.c.l., dlvd. E lb. .18½ - —
tanks, dlvd. E lb. .15½ - —
Psyllium seed, black, bgs. lb. .55 - —
blonde, bgs. lb. .18 - —
husks, bgs lb. .40 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03½ - .04¼
smaller lots lb. .03⅞ - .04½
imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½ - —
fine bgs. ton lots lb. .04 —
sun dried coarse bge ton. lots lb. .02½ - .04
fine bgs. ton lots lb. .02½ - .04
Pumpkin seed, bgs lb. .25 - .26
Pyrethrin, syn. (see Allethrin)
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works lb. .45 - —
powd., 1.3% pyrethrins, obls., works lb. .65 - —
liq., 20-1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 8.75 - 8.85
100-1 basis (10 grams pyrethrins per 100cc odorless base), dms. works gal. 41.75 - 42.75
oleoresin, dewaxed, 20% dms., works lb. 10.00 - —
purif., 20% dms., works lb. 10.00 - 10.10
Pyridine, denaturing, dms., c.l., works and frt. equald gal. 2.77 - —
l.c.l., same basis gal. 2.80 - —
refd., 2°, non-ret dms., l.c.l., same basis lb. .75 - —
Pyridoxine hydrochloride, bots., 100-gram lots gram. .37½ - —
Pyrites, Canadian, works long-ton. 3.00 - 5.00
Pyrocatechol (see Catechol).
Pyrogallol, NF dms. lb. 3.27 - 3.30
Pyroxylin, scrap, ungrd., amber, dms., works lb. .20 - —
black, dms., works lb. .12 - —
mixed, mottled c.ms. works lb. .13 - —
shavings, amber, cs., works lb. No stocks.
mixed colors, dms. works lb. .11 - —
white, china, ivory, dms., works lb. .16 - —
dense opaque, dms. works, lb. .12 - .15
translucent pastels, cs., works, lb. .14 - —
transparent colorless, dms., works lb. .25 - —
colors, dms. works lb. .15 - —
USP bots lb. 9.50 - —

Q

Quassia chips lb. .17 - —
Quebracho extract, clarif., grd., 70% tannin bgs. c.l., lb. .16½ - .16¾
liq., 35% tannin bbls. works, lb. .08¼ - —
solid, clarif., 64% tannin, bgs., c.l., exdock, duty extra lb. .12 23 64
ord., 63% tannin, bgs., c.l., same basis lb. .11 21 32 —
Quercitron extract, cryst., No. 1, bbls., l.c.l. lb. .40 - —
liq., No. 1, bbls. l.c.l lb. .19 - —
Quicksilver (see Mercury metal).
Quince seed, bgs lb 2.00 Nom.
Quinidine sulfate, USP, cns., 100-oz. lots oz. .73 - .87
Quinine, NF, cns., 100-oz. lots oz. .54 - —
Bisulfate, USP, cns., 100-oz. lots, oz. .37½ - —
Ethylcarbonate, NF, cns., 100-oz. lots oz. .63½ - —
Hydrobromide, NF, cns., 50-oz. cns oz. .47½ - —
Sulfate, USP, cns., 100-oz. lots oz. .42 - —
Quinine and Urea hydrochloride, NF, cns oz. .56 - —
Quinoline, dms., c.l., frt. equald lb. .50¾ - —
l.c.l., same basis lb. .51¼ - —
tanks, same basis lb. .50 - —

R

R salt, paste, dms., frt. alld., 100% basis lb .88 —
powd. frt alld. 100% basis lb. .98 - —
Rauwolfiia serpentina, root, powd., bbls. dms lb 2.00 3.00
Red, BON acid maroons, pure, bbls., lb 1.75 - —
resinated, bbls lb 1.50 - —
arylid, deep shades, bbls lb. 3.50 - —
light shades, bbls lb 2.75 —
maroon, bbls lb 3.60 5.90
Cadmium, CP, dark shade, bbls., frt. alld. E of Rockies lb. 4.20 - —
light shade, bbls., same basis, lb 4.00 - —
medium shade, bbls., same basis lb. 4.25 - —
medium light shade, bbls., same basis lb. 4.05 - —
orange shade, bbls, same basis lb. 3.95 - —
orange red, bbls., same basis, lb 1.81 - —
Selenide, lithopone, light red shades, bbls., same basis lb. 2.24 - —
medium light red shades, bbls., same basis lb. 2.49 - —
medium red shade, bbls., same basis lb. 2.99 - —
dark red shade, bbls., same basis lb. 3.44 - —
maroon shade, bbls., same basis lb. 3.77 - —
dark maroon shade, bbls., same basis lb. 3.90 - —
Mercury, lithpone, light shade, bbls lb. 1.95 - —
medium-light shade, bbls. lb. 2.10 - —
medium shade, bbls lb. 2.25 - —
dark shade, bbls lb. 2.40 - —
Red, carmine No. 40 (see Carmine).
Dyes (see Dyes, coaltar).
Eosin, toner, bbls., works lb. 1.65 - —
Indian, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y lb. .12¾ - —
Iron oxide, nat., 75-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa., Copley, O., Easton, Pa., bgs., c.l., works lb. .0675 - —
Lake C toner, alizarin, bbls., works lb. 1.13 - —
rubine toner, pure, bbls., works, lb. 1.50 - —
resinated, bbls., works lb. 1.40 - —
Virginia type, bbls., works lb. 1.40 - —
Maroon, toner, MNPT, kgs., c.l., works lb. 3.60 - —
10,000-lb. lots, works lb. 4.22 - —
smaller lots, works lb. 4.24 - —
Metallic, bbls., c.l., works lb. .02½ - —
l.c.l., works lb. .02¾ - —
Naphthol, ITR, bbls., works lb. 5.25 - —
Oxide (see Red iron oxide).
Persian Gulf, bgs., c.l., works. lb. .07¾ - —
l.c.l., works lb. .08 - —
Para toner, bbls lb. 1.10 - —
chlorinated, kgs lb. 1.10 1.15
Phloxin toner (see Red eosin toner).
Rhodamine, molybdated, PMA, kegs lb. 5.35 - —
tungstated, PTMA, works kegs.
Spanish oxide, bbls., c.l., ex-dock. lb. .05¾ - —
l.c.l., ex dock lb. .06 —
ex whse., New York lb. .06½ -
Toluidine toner, deep shades, kgs., works lb. 1.62 - 1.65
light shades, kgs., works lb. 1.62 - 1.65
Turkey, bbls., works lb. .62 - —
Tuscan, bbls., frt equald lb. 24½ - .25
Venetian, 15%, bgs., works lb. .0350 - .0037
20% bgs. works lb. .0475 - —
25% bgs. works lb. .0525 - —
30% bgs., works lb. .0550 - —
35% bgs., works lb. .0575 - —
40% bgs works lb. .0625 - —
Watchung-type, bbls lb. 1.95 —
Red KB base (see 4-Chloro-2-aminotoluene).
Red, precipitate (see Mercuric oxide, red)
Red saunders, NF, powd., bbls lb. .35 .40
Reserpine, cryst., bots gram. 8.00 - 9.00
Resorcinol, tech grade, dms., c.l., works, frt. equald lb. .77½ - —
l.c.l., same basis lb. .78½ - —
USP, dms., works lb. 2.75 - —
Monoacetate, NF, dms lb. 3.00 - 3.25
Rhatany root, bgs lb 15 16
Rhodinol, 5-lb. cans lb. 25.50 -34.00
Rhubarb root, India, whole, bgs lb. 1.75 Nom.
powd., bbls lb 2.50 Nom.
Riboflavin, USP, bots., dlvd. kilo. 65.00 - —
readily soluble, bots., dlvd kilo. 130.00 —
5'-phosphate-sodium, bots., 100-kilo lots or more kilo. 125.00 - —
Rochelle salt (see Potassium sodium tartrate).
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib dms., works, 100% basis lb. 10.00 - —
resin, 25-45%, fib dms., works, 30% basis lb. 3.00 - 3.30
Rottenstone, bgs, 5-ton lots, exwhse lb. .03 —
ton lots, same basis lb. .04 —
Rutin, NF, fib dms, 25-kilo lots, kilo. 17.50 -18.50
10 to 25-kilo lots kilo. 17.50 - 20.00
1 to 10-kilo lots kilo. 18.90 - 20.00
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
l.c.l. same basis lb. .24 - —

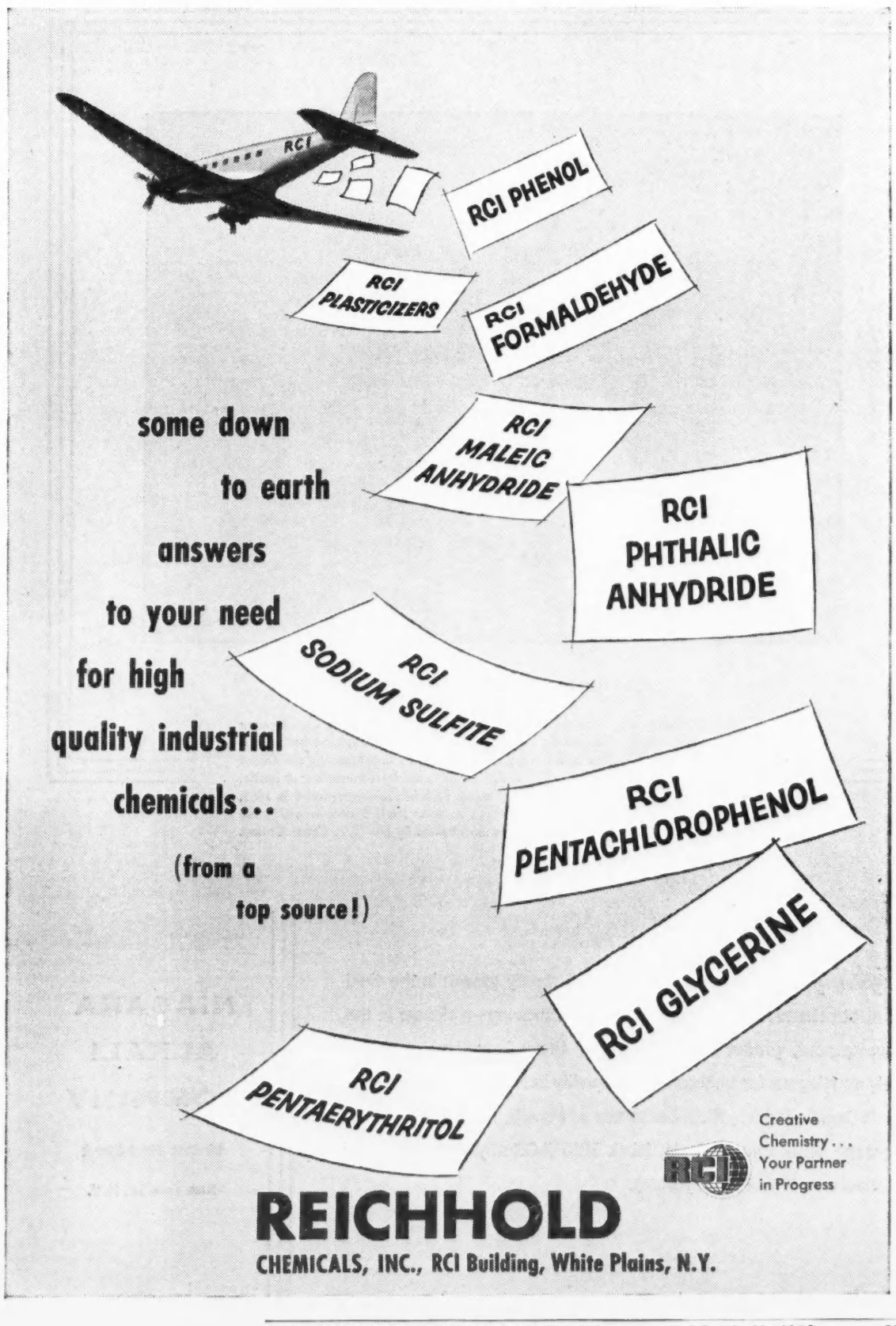
S

Sabadilla seed, powd, bbls lb. 49 .6½
activated, ground with lime, bbls lb. .30 .32
Saccharin, USP, cryst., soluble, dms., 1000 lb lots lb 1.60 —
smaller lots lb 1.70 1.80
works lb .77½ —
l.c.l., works lb. 78½ - —
USP, cryst., dms., works lb. 2.75 - —
powd dms., works lb 2.95 - —
soluble, insoluble, d m s., 1000 lb lots lb 1.65 —
smaller lots lb 1.75 1.95
Saffron, Spanish, USP, tins lb. 35.60 -40.00
Safrol, dms lb 1.60 - —
Sage, Cretan, bgs lb. .11 - —
Dalmatian, bgs. lb. .44 - —
Italian lb. .26 Nom.
Sago flour, raw, bgs lb. .07 .07½
refd., bgs lb. .08½ - .09
Sal soda (see Soda sal)
Salicylamide, 100-lb. dms lb 1.00 - —
Salol, NF, gran., bbls., kgs lb 1.15 - —
Powdered salol, 25c higher
Salt rock, paper bgs., c.l 100 lbs. 1.03 - —
table, vacuum common, fine, paper bgs., c.l 100 lbs. 1.23 - —
Saltcake, dom., bulk works, 100% Na_2SO_4 basis ton 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, East Indies, chips bgs. .65 .66
powd., fib dms lb. .75 .76
Sarsaparilla root, unp., Honduras, bls lb. .58 .62
Mexican, bls. lb. .38 - .62
Sassafras root bark, ord., bls lb. .45 - —
select, bbls lb. .65 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb 95 - —
powd bgs., frt. alld., 100% basis, lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 17.40 - —
Seidlitz mixture, bbls., 5,000-lb. lots lb. .30½ —
smaller lots lb .31 .32
Selenium, powd., dms., dlvd lb. 13.50 -15.50
Senega root, bls lb. 3.10 - —
Senna leaves, Alex., whole and, half, bls lb. .19 - —
siftings lb. .17 - —
Tinnevelly, No. 1, bls lb. .16 - .18
No. 2, bls. lb. .13 - .15
No. 3, bls. lb. .11 - .13
powdered, bbls., bxs lb. .18 -
pods, bls lb 14 - —
Serpentaria, root, bls lb. 5.50 - —
Sesame seed, Egyptian, nat lb. .10¾ - —
hulled lb. .21 - —
Nicaragua, hulled, shipt., bgs., lb. .17½ - —
nat., bgs. lb. .20½ - —
Salvadorian, natural lb. .17½ - —
Syrian, bgs., natural lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .61 - —
bbls., 1,500-lb lots lb. .63 - —
kgs., 1,500-lb lots lb. .64 - —
refd., bgs., 1,500-lb. lots lb. .69 - —
bbls., 1,500-lb lots lb. .71 - —
kgs., 1,500-lb. lots lb. .72 - —

Bonedry shellac prices for less than 1,500 lb lots 1c. per lb higher for all packages.

Lemon No. 1, bgs., 10-bg. lots, lb. .53 - —
No. 2, bgs., 10-bg. lots lb. .51 - —
Superfine bgs., 10-bg. lots lb. .49 - .50
TN, bgs., 10-bg. lots lb. .48 - —
Shellac in 1 to 10-bg. lots 1c. per lb more.

Shingle stain oil (see Oil, shingle stain).
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton 25.00 - —
l.c.l., works, exwnse ton 45.00 - 55.00
Hard-quartz, 99½, 325 mesh, bgs., c.l., works ton 20.00 - —
l.c.l., works ton 25.00 - 30.00
140 mesh, bgs., c.l., works ton 15.00 - —
l.c.l., works ton 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
l.c.l., works lb. .22 - .30½
tanks, works lb. .17 - —
Silver bullion, ingots, cs Troy oz. .91⅛ - —
Cyanide, fib. dms., 2,500-oz. lots. oz. .83¼ - —
1,000-oz. lots oz. .83⅝ - —
500-oz. lots oz. .83¾ - —
100-oz. lots oz. .84 - —
Nitrate, CP, cryst., bots., 2,500-oz. lots oz. .59½ - —
1,000-oz. lots oz. .61 - —
500-oz. lots oz. .61¼ - —
250-oz. lots oz. .61¾ - —
USP granular silver nitrate 4c. per oz higher.
Proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.05 - —
strong, NF, bots., dms., 1,000-oz. lots oz. 1.00 - —
Soapbark, whole, bls. lb. .45 - —
crushed, bls., bbls. lb. .55 - —
powd., bbls lb. .55 - —
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.80 - —
l.c.l., stock points 100 lbs. 2.90 - 4.67
bbls., c.l., works 100 lbs. 2.40 - —
l.c.l., stock points 100 lbs. 3.55 - 4.22
bulk, c.l., works 100 lbs. 1.50 - —
light, 58%, paper bgs., c.l., works 100 lbs. 1.75 - —
l.c.l., stock points 100 lbs. 3.85 - 4.62
bbls., c.l., works 100 lbs. 2.30 - —
l.c.l., stock points 100 lbs. 3.35 - 5.62
bulk, c.l., works 100 lbs. 1.45 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 4.50 - —
l.c.l., stock points 100 lbs. 5.60 - —
liq., 50% sellers, tanks, works, dry basis 100 lbs. 2.80 - —
rayon type, sellers' tanks, works, dry basis 100 lbs. 2.80 - 2.90
70%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
rayon-type, sellers tanks, works, dry basis 100 lbs. 2.90 - 3.00
solid, 76%, dms., c.l., works, 100 lbs. 4.10 - —
l.c.l., stock points 100 lbs. 5.30 - —
Sal., conc., bgs., c.l., works 100 lbs. 2.30 - —
smaller lots, works 100 lbs. 2.60 - —
Sodium acetate, anhyd., bgs., c.l., works lb. .13 - —
dms., c.l., works lb. .13¾ - —
NF, 60% gran., dms., c.l., works lb. .14 - —
l.c.l., works lb. .15½ - —
Alginate, NF, white powd., dms., ton lots, works lb. .87 - 1.30
refd., bbls., works lb. .83 - —
p-Aminobenzoate, dms., 1,000-lb. lots or more lb. 2.25 - —
smaller lots lb. 2.35 - 2.45
p-aminosalicylate, dms., 1,000-lb. lots or more, frt. adjusted lb. 3.75 - —
smaller lots, same basis lb. 2.80 - 4.25
Antimoniate, bbls., c.l., dlvd. E lb. .28 - —
l.c.l., dlvd. E lb. .29½ - —
Arsenate, 45% arsenic pentoxide, dms., c.l., works lb. .12½ - —
l.c.l., works lb. .13¾ - .14½
Arsenite, 90%, pink powder, 75% arsenious oxide, dms., works. lb. .12¼ - —
l.c.l., works lb. .13 - .14½
soln., dms., works gal. .59 - .67
Ascorbate, dms., 25-50 kilo lots. kilo 16.00 - —
10-kilo lots kilo 16.35 - —
5-kilo lots kilo 16.75 - —
1-kilo lots kilo 17.00 - —
bots. 500-gram lots kilo 17.50 - —
Benzoate, tech., bbls., dms., lots or more lb. .39 - —
USP, bbls., dms., 100-lb. lots, or more lb. .46 - —
Bicarbonate, USP, gran., bgs., c.l., works 100 lb. 2.80 - —
l.c.l., works 100 lbs. 3.55 - —
powd., bgs., c.l., works 100 lbs. 2.40 - —
l.c.l., works 100 lbs. 3.15 - —
Bichromate, bgs., c.l., works lb. .12¼ - —
l.c.l., works lb. .12¾ - .13¾
Bifluoride, bbls., c.l., works, frt. equaled lb. .18½ - —
l.c.l., same basis lb. .1890 - —
Bisulfate, bulk, c.l., works 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 - 3.60
l.c.l., frt. equald 100 lbs. 3.50 - 4.10
Bisulfite, anhyd., bgs., c.l., works. 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 4.90 - —
soln., 35°, bbls., c.l., works. 100 lbs. 1.55 - —
l.c.l., works 100 lbs. 2.05 - —
Borate (see Borax).
Bromide, USP, bbls., works lb. .36 - —
Carboxymethyl cellulose (see CMC).
Carbonate, cryst., monohydrated (see Soda, sal).
monohydrated bgs., c.l., works. 100 lbs. 3.00 - —
l.c.l., works 100 lbs. 3.40 - —
Chlorate, cryst., dms., c.l., works. lb. .09 - —
l.c.l., works lb. .10½ - .11¼
Chloride, tech (see Salt).
USP bgs. lb. .05 - .12
Chlorite, tech., dms., c.l., works. lb. .58 - —
20-ton lots or more, works. lb. .66 - —
smaller lots, works lb. .70 - .73
Chloroacetate, tech., dms., c.l., works lb. .27 - —
l.c.l., works lb. .28 - —
Chromate, dms., c.l., works lb. .13¼ - —
l.c.l., same basis lb. .13¾ - .15
Citrate, anhyd., dms lb. .62 - —
NF VIII, gran., dms lb. .26½ - .27½
USP, XIV gran., dms lb. .29½ - .30½
Sodium citrate, USP, powd. prices ½c. higher.
Cyanate, dms., 1,000-lb. lots, works lb. .85 - 1.10
smaller lots, works lb. 1.00 - 1.25
Cyanide flake, 96-98%, dms., c.l., or 20,000-lb. lots lb. .178 - —
over 1,000-lb. lots lb. .188 - —
100-lb. to 1,000-lb. lots lb. .198 - —
Granular sodium cyanide 1c. higher.
Diacetate, 33-35% acidity, 250-lb. dms., works lb. .15 - —
l.c.l., works lb. .15¾ - —
anhyd., dms., c.l., works lb. .18 - —
l.c.l., works lb. .18¾ - —
Dichromate (see Sodium bichromate).
Ferrocyanide, bgs., 10-ton lots. lb. .13½ - —
smaller lots lb. .14 - —
Fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390 - —
l.c.l., works lb. .1430 - —
Formate, bgs., c.l., works lb. 7.60 - —
l.c.l. works 100 lbs 8.65 - —
Gentisate, 100-lb. fib. dms lb. 8.50 - —
Gluconate, refd., dms lb. .80 - .83
tech, dms lb. .35 - —
Sodium glutamate, mono., dms., c.l. lb. 1.20 - —
Hydride, dms., works lb. 1.80 - 3.00
Hydrosulfide (see Sodium sulfhydrate).
Hydrosulfite, dms., c.l., frt. alld. lb. .22 - —
l.c.l., frt. alld lb. .22½ - —
Hydroxide, tech. (see soda caustic).
NF, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .18½ - .23
Hypophosphite, NF, dms., ton-lots or less lb. .95 - .98
Hyposulfite, NF (see Sodium thiosulfate)
pea crystals, bgs 100-lbs. 4.50 - —
gran., bgs., c.l., works 100 lbs. 4.75 - 5.00
Hyposulfite, photo grade, bgs., c.l., works 100 lbs. 4.50 - 4.75
l.c.l., works 100 lbs. 5.00 - 5.05
tech., bgs., works 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 4.90 - 6.90
Sodium hyposulfite crystals in bbls., 50c. higher.
Iodide, USP, bots., dms lb. 2.55 - 2.62
Lactate, edible, 50%, cbys., dms., works lb. .21½ - —
60% cbys., dms., works lb. .26½ - —
Lactate, tech., 50%, cbys., dms., works lb. .16½ - —
Lauryl sulfate, dms., c.l., dlvd lb. .21 - —
l.c.l., dlvd lb. .22 - —
tanks, dlvd lb. .18½ - —
Metabisulfite (see Sodium bisulfite).
Metaborate, octahydrate, gran., bgs., c.l. works ton 85.00 - —
l.c.l., ex whse ton 135.50 - 140.50
sodium metaborate octahydrate in bbls, $24.50 per ton higher.
Sodium metaborate tetrahydrate, dms., c.l., works ton 204.00 - —
Metallic bricks, 14,000-lb. lots or more, works lb. .17 - .19
less than 14,000-lb lots, works. lb. .175 - .195
tanks, works lb. .16 - —
Metanilate, bbls., frt. alld lb. .62 - —
Metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.35 - —
l.c.l., works lb. 5.65 - 7.55
dms., c.l. 100 lbs. 5.75 - —
l.c.l. 100 lbs. 6.10 - 8.00
Pentahydrate, bgs., c.l., works 100 lbs. 4.25 - —
l.c.l., works 100 lbs. 4.60 - 6.50
dms., c.l., works 100 lbs. 4.75 - —
l.c.l., works 100 lbs. 5.10 - 7.00
Molybdate, anhyd., dms., dlvd lb. .88 - —
cryst., dms., works lb. .69 - .73
Monohydrate (see Sodium carbonate monohydrated).
Naphthionate bbls lb .70 - —
Nitrate, crude, dom., bgs., c.l., works ton 47.00 - —
bulk, c.l., works ton 43.50 - —
imp., 100-lb. bgs., c.l., Atl, Gulf, Pac., whse ton 51.25 - —
bulk c.l. same basis ton 47.75 - —
Nitrite, USP, bbls., c.l., works, frt. equaled lb. .08 - —
l.c.l., same basis lb. .09½ - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.30 - —
l.c.l., works 100 lbs. 6.65 - 7.25
hydrated, flake, bbls., c.l., works 100 lbs. 5.40 - —
l.c.l., works 100 lbs. 7.30 - 7.65
Oxalate, 88%, bgs., works 100 lbs. 10.85 - —
Para-aminobenzoate (see Sodium p-Aminobenzoate).
Para-aminosalicylate (see Sodium p-Aminosalicylate).
Pentachlorophenate, briquets, bgs., c.l., works, frt. equald lb. .25 - —
l.c.l., same basis lb. .26½ - .33
pellets bgs. c.l. same basis lb. .25 - —
l.c.l., same basis lb. .26½ - .33
Pentachlorophenate, powd., bgs., dms., c.l., same basis lb. .24 - —
l.c.l., same basis lb. .25½ - .32
Pentachlorophenate, 20,000 lbs., min. truckloads, ¼c per lb over carlot prices.
Perborate, NF, tech., bgs., c.l., works lb. .173 - —
l.c.l., works lb. .178 - —
Peroxide, dms., c.l., dlvd. E. of Miss lb. .1360 - —
l.c.l. same basis lb. .1910 - .1960
Phenosulfonate, USP IX, gran., dms lb. .44 - .45



Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald..100 lbs. 7.45 • —
l.c.l., works .....100 lbs. 7.85 • —
USP dried powd. bgs., dms., works lb. .19 • .20½
monobasic anhyd., bgs., c.l., frt. equald..100 lbs. 8.70 • —
l.c.l., frt. equald..100 lbs. 9.10 • 9.70
duohydrate, bgs., c.l., frt. equald..100 lbs. 7.20 • —
l.c.l., frt. equald..100 lbs. 7.60 • 8.20
tribasic, anhyd., bgs., c.l., frt. equald..100 lbs. 8.65 • —
l.c.l., frt. equald..100 lbs. 9.05 • 9.65
cryst., bgs., c.l., t.l., frt. equald..100 lbs. 4.40 • —
l.c.l., frt. equald..100 lbs. 4.80 • 5.40

Sodium phosphates in dms., 60c. higher than bgs.

Prussiate, yellow (see sodium ferrocyanide).
Pyrophosphate, acid, bgs., c.l., works, frt. equald..100 lbs.10.60 • —
l.c.l., works.....100 lbs.11.35 •11.60
ferric, dms., 1,500-lb. lots, works..lb. .38½- —
smaller lots, works.....lb. .41½- .43½
tetrabasic, anhyd., bgs., c.l., works, frt. equald..100 lbs. 7.52½- —
l.c.l., frt. equald....100 lbs. 7.92½- 8.52½
Salicylate, USP, dms.....lb. .71 • .74
powd., dms.....lb. .47 • .48

Sodium sesquicarbonate, bgs., c.l., works..100 lbs. 2.25 • —
l.c.l., dlvd., zone 1....100 lbs. 4.00 • 4.25
zone 2.....100 lbs. 4.25 • 4.50
zone 3.....100 lbs. 4.65 • 4.80
zone 4.....100 lbs. 5.25 • 5.50

Sales zones are: (1) All States E. of Miss. R. and N of south bound of Ky. and Va.; Ala., La., and Miss., south of 31° Tex E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia. and St. Louis; (2) Ark. E of 93° Ga.; Iowa (except Davenport), Minn.; Mo. (except St. Louis), Neb., E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No of 31°; (3) Ark. W. of 96°, Kan., Neb W of 98°; N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo., and El Paso, Tex.

Sesquisilicate, hydrated, bgs., c.l., works..100 lbs. 4.80 • —
l.c.l., works.....100 lbs. 6.40 • 8.50
dms., c.l., works.....100 lbs. 5.20 • —
l.c.l., works.....100 lbs. 7.15 • 7.40
Silicate, liq., 40° Be, 1:3.2, turbid, dms., c.l., works..100 lbs. 1.45 • —
l.c.l., works..100 lbs. 1.80 • 2.30
tanks, works.....100 lbs. 1.10 • —
47° Be, turbid, 1:2.9, dms., c.l., works..100 lbs. 2.10 • —
l.c.l., works.....100 lbs. 2.70 • 2.95
tanks, works.....100 lbs. 1.75 • —

Sodium silicate, 52° Be, turbid, 1:2.4, dms., c.l., works..100 lbs. 2.45 • —
l.c.l., works....100 lbs. 2.80 • 3.30
tanks, works....100 lbs. 2.10 • —
solid, 1:3.2, bgs., works....ton.62.50 • —
Silicofluoride, bgs., c.l., works.lb. .075 • —
l.c.l., works.....lb. .079 • —
Sodium silicofluoride in dms., 0.4c. per lb. higher.
Stannate, dms., works, frt. alld. E..lb. .580 • .634
Sulfa drugs (see Sulfa name).
Sulfanilate, bbls., works.....lb. .22 • —
Sulfate, NF, VII, dried, powd., dms..lb. .22½- —
tech., anhyd., bgs., c.l., dlvd. E..ton.52.00 • —
detergent grade, bgs., c.l., works..ton.34.00 • —
rayon grade, bgs., c.l., works, ton.31.00 • —
USP, cryst., fib. dms.....lb. .17½- .18
gran., fib. dms.....lb. .17½- .18
Sulfide, flake, dms., c.l., works, E., frt. equald..lb. .05¼- —
l.c.l., same basis.....lb. .05¾- —
fused, bbls., c.l., works E., frt. equald..lb. .04¾- —
l.c.l., same basis.....lb. .05¼- —
Sulfite, anhyd., bgs., c.l..100 lbs. 3.00 • —
l.c.l., same basis.....100 lbs. 3.50 • —
Sulfhydrate, flake, 70-72%, dms., c.l., works..lb. .06½- —
l.c.l., works.....lb. .07 • —
liq., 40-44%, tanks, works, 100% basis..ton.115.00 • —
Sulfocyanide CP (see Sodium thiocyanate).
Tetraborate (see Borax).

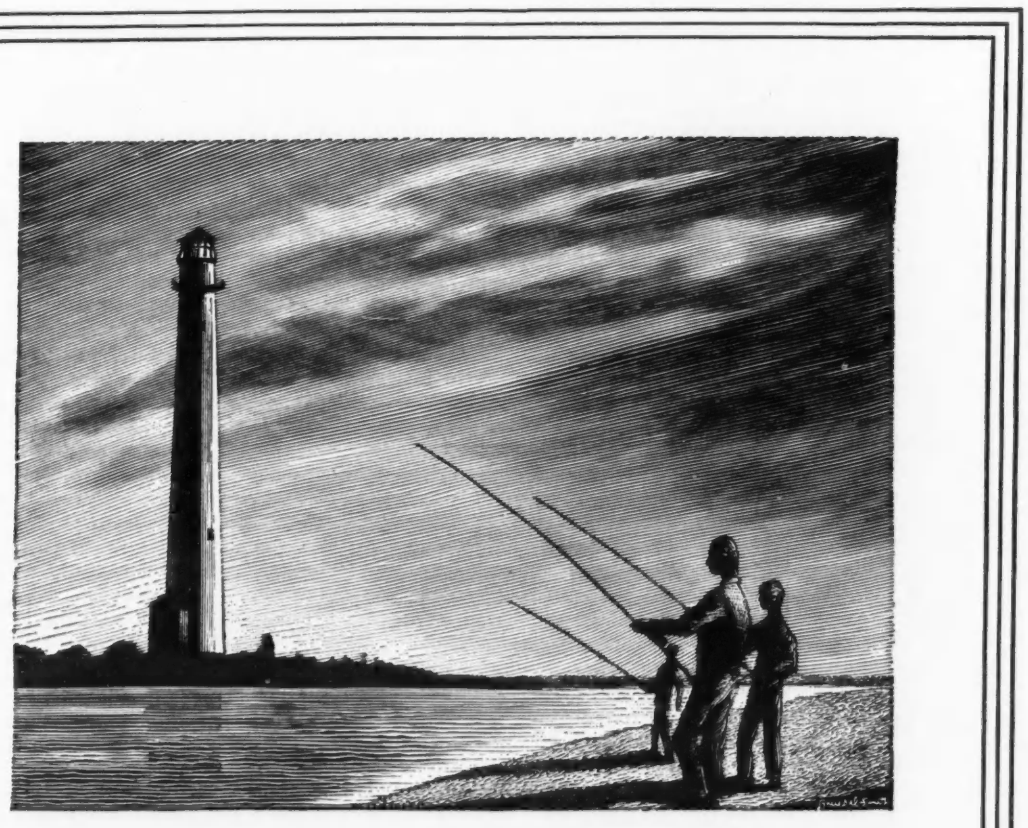
Sodium tetrasulfide, liq., 40%, dms., c.l., works..lb. .03½- —
l.c.l., works.....lb. .04 • —
Thiocyanate, CP, dms.....lb. .55 • .85
tech., anhyd., 1 ton lots or more, works..lb. .317 • —
less than ton lot, works..lb. .337 • —
Thiosulfate, NF, cryst., bbls..lb. .12½- —
tech (see Sodium hyposulphite).
Titanate, ctns., c.l., works.....lb. .10½- —
5-ton lots, works.....lb. .10¾- —
1-ton or less, works.....lb. .11 • —
Toluene sulfonate, dms., c.l., or t.l..lb. .38 • —
l.c.l.....lb. .42 • —
Trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E..lb. .37½- —
l.c.l., frt. adjusted, E..lb. .39½- —
50 lb. dms., c.l., frt. alld. E. lb. .38 • —
l.c.l., frt. adjusted E..lb. .40 • —
10-lb. cns., c.l., frt. alld. E. lb. .44 • —
l.c.l., frt. adjusted E....lb. .46 • —

Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.

Tripolyphosphate, bgs., c.l., works, frt. equald..100 lbs. 7.87½- —
l.c.l., same basis.....100 lbs. 8.27½- 8.87½
Trisilicate, powd., 1:3.2, bgs., c.l., works..100 lbs. 8.65 • —
l.c.l., works.....100 lbs. 9.40 • 9.60
dms., c.l., works.....100 lbs. 9.05 • —
l.c.l., works.....100 lbs. 9.80 •10.20
Tungstate, tech., kgs., dlvd. E lb. 2.15 • —
Sodium-ammonium phosphate, bbls., works, frt. equald..lb. .23 • —
Sodium carboxymethyl cellulose(see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd..lb. .21 • —
l.c.l., same basis.....lb. .21½- —
Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works..lb. .28 • —
smaller lots, same basis..lb. .30 • —
Solvent naphtha, coaltar, high flash, tanks, frt. equald..gal. .31 • .35
petroleum (see Petroleum solvent, partial aromatic).
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .32 • —
10,000 to 20,000-lb. lots, works, lb. .34 • —
smaller lots, works.....lb. .37 • .39
Tristearate, fib. dms., 20,000-lb. lots, works lb. .33 • —
10,000 to 20,000-lb. lots, works, lb. .35 • —
smaller lots, works.....lb. .38 • .40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works..lb. .23 • —
1 to 5-ton lots, works.....lb. .25 • .26
powd., dms., 1 to 5-ton lots, works..lb. .38 • .39
soln., coml., aqueous, dms., c.l., works..lb. .24¼- —
ton lots, works.....lb. .25 • —
smaller lots, works....lb. .25¼- —
tanks, works.....lb. .23¼- —
reg., 70%, aqueous dms., c.l., works..lb. .16 • —
ton lots, works.....lb. .16¾- —
smaller lots, works..lb. .17 • —
tanks, works.....lb. .15 • —
Soybean meal, 44%, bulk, Decatur. ton.47.00 • —
protein, chemically isolated, bgs., c.l., works lb. .23 • —
mechanically refd., bgs., l.c.l., works..lb. .066 • —
Sparteine sulfate, cns.....oz. .80 • .85
Spearmint leaves, dom., bls.....lb. .75 • —
Spruce extract, liq., reg. tanks, works lb. .01¾- —
powd., super, bgs., c.l., works. lb. .05¼- —
l.c.l., works .....lb. .05½- —
Squill, white, bls.....lb. .16 • .18
powd., bbls., bxs.....lb. .17 • .20
St. John's bread, edible, bls...lb. .13 • .15
Stannic chloride, anhyd., dms., works lb. .795 • .805
Oxide, dms., dlvd. E.....lb. 1.03 • 1.04
Stannous chloride, anhyd., dms., works lb. .921 • 1.190
Hydrous, cryst., dms., works. lb. .80½- .81¼
Sulfate, dms., works.....lb. .976 • .996
Starch, corn, pearl, paper bgs., c.l., 100 lbs. 7.13 • —
l.c.l. .....100 lbs. 7.28 • —
powd., paper bgs., c.l....100 lbs. 7.25 • —
l.c.l. .....100 lbs. 7.40 • —

Prices for corn starch in cotton bags, 25c. per 100 lbs. higher.

Potato, dom., Idaho, bgs., c.l., works lb. .06 • —
Maine, bgs., c.l., works....lb. .05¾- —
ex whse, N. Y.....lb. .08 • .08¾
Rice, bgs., l.c.l.....lb. .15½- .16
Wheat, bgs.....lb. .08½- .09
Star root (see Helonias root).
Stargrass Root (see Aletris root).
Stavesacre seed, bgs.....lb. .60 • .61
Stearine oleo (see Oleostearine).
Stramonium leaves, bgs.....lb. .18 • .20
Streptomycin hydrochloride, bulk, gram. .063 • .07
Strontium bromide, NF, cns., dms. lb. .75 • .84
Carbonate, pure, dms., 5-ton lots or more, works lb. .35 • —
1-ton lots, works.....lb. .37 • —
tech., dms., works.....lb. .19 • —
Chromate, bbls., works.....lb. .46 • —
Iodide, jars, 25-lb. lots.....lb. 3.42 • —
Nitrate, bbls., c.l., works..100 lbs.11.00 • —
l.c.l., works .....100 lbs.12.00 • —
Salicylate, NF, dms.....lb. 1.75 • —
Sulfate, air floated, 90%, 325 mesh, bgs., works. ton.56.70 •66.15
Strophanthin, K, bots.....oz.25.00 •25.50
G. (see Ouabain, USP).
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 • 3.75
Strychnine, NF, powd., cns., 100-oz. lots oz. 1.10 • —
Phosphate, NF, cns., 100-oz. lots.oz. 1.14 • —
Sulfate, USP, cryst., cns., 25-oz. lots oz. .96 • —
powd., 100-oz. lots.....oz. .85 • —
Styrax, USP, cs.....lb. .78 • .80
Styrene monomer, polymer grade, 99½%, dms., c.l., frt. alld. lb. .22½- —
l.c.l., same basis....lb. .23½- —
tanks, same basis.....lb. .20½- —
synthetic rubber grade, 99%, dms., c.l., frt. alld..lb. .18½- —
l.c.l., same basis.....lb. .19½- —
tanks, same basis.....lb. .16½- —
Styrolyl acetate, bots.....lb. 1.45 • 1.70
Sucrose, crude, bgs., divd., N. Y. lb. .0555- —
refd., white, bgs., refy., E....lb. .0855- —
Octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works..lb. .76 • —
Sugar (see Sucrose, crude, refined).
Sulfabenzamide, dms.....lb. 4.00 • 4.50
Sodium, dms.....lb. 4.10 • 4.60
Sulfacetamide, fib. dms.....lb. 4.00 • 4.20
Sodium, fib. dms.....lb. 5.00 • 5.20



FAMOUS LIGHTHOUSES OF AMERICA

BARNEGAT LIGHT is located on Island Beach at the south side of the entrance to Barnegat Inlet, New Jersey. For more than a century its beacon has been a familiar course-marker to all craft traveling the steamer lanes off the Jersey coast. The first lighthouse, built in 1835, was leveled by a pounding Atlantic. The present tower, 161 feet high and made of brick, was completed in 1858, 900 feet south of the original structure. The tower itself is now owned by the State of New Jersey but the light is maintained by the U. S. Coast Guard.

Lighting Ways to Progress and steady growth in the field of electrochemicals is the Niagara Alkali Company—a pioneer in the development, production and use of these important products. Rely on Niagara for uniformly high quality in Nialk® Liquid Chlorine, Nialk Caustic Potash, Nialk Carbonate of Potash, Nialk Paradichlorobenzene, Nialk Caustic Soda, Nialk TRICHLORethylene, Niagathal® (Tetrachloro Phthalic Anhydride).

NIAGARA ALKALI COMPANY

60 East 42nd Street

New York 17, N. Y.

Sulfadiazine, USP, microcrystals, dms.	lb.	10.60	-11.10
powd. dms	lb.	10.25	-10 75
Sulfadiazine-sodium, USP, dms.	lb.	11.25	-11.75
microcrystals, dms.	lb.	11.60	-12.10
Sulfaguanidine, USP dms	lb.	2.50	—
Sulfamerazine, USP, microcrystals.	lb.	10.65	-11.15
Sulfamerazine-sodium, USP, dms.,	lb.	11.25	-11 75
Sulfamethazine, microcrystals, dms.,	lb.	8.90	9.40
powd., dms	lb.	8 50	9 00
Sulfanilamide, USP 30-80 mesh., dms	lb.	1.40	1.60
microcrystals, dms	lb.	1.70	1 90
powd. dms	lb.	1.30	1.50
Quinoxaline, veterinary, dms	lb.	6.40	6.75
Sulfapyridine NF powd. bots. tins.	lb.	7.00	7.50
Sulfapyridine-sodium, monohydrate, dms	lb.	7.50	8.00
Sulfathiazole USP, microcrystals, dms	lb.	2.85	3.00
powd. dms	lb.	2.50	2.65
Sulfathiazole-sodium, USP, dms	lb.	2 75	2.90
Sulfur coml. flour bgs. mines 100 lbs.		2.30	—
bbls. mines 100 lbs		3.05	—
lump, bgs., mines 100 lbs.		2.20	—
bbls. mines 100 lbs		2.65	—
crude, bulk, c.l., mines, contract,	long-ton.	26 50	—
export, t.o.b vessels, Gulf ports	long-ton.	28.00	-31 00
domestic and Canada, f.o.b vessel Gulf port	long-ton.	28.00	—
refd., flowers, USP, bgs., mines. 100 lbs.		4.00	—
bbls 100 lbs.		5.25	—
flour, light bgs., mines 100 lbs.		3.60	—
bbls. mines 100 lbs.		4.50	—
lump bgs. mines 100 lbs		3.20	—
rolls, bgs., mines 100 lbs.		3.85	—
bbls., mines 100 lbs.		4.40	—
salf block bgs mines 100 lbs.		3.50	—
virgin block, bbls., mines. 100 lbs.		3.45	—
rubbermakers, coml., reg., bgs., mines 100 lbs.		2.40	—
bbls., mines 100 lbs.		3.55	—
98-100% passing through 325 mesh, bgs. mines 100 lbs		3.50	—
bbls. mines 100 lbs.		3.65	—
refd. bgs., mines 100 lbs.		3.25	—
bbls mines 100 lbs.		4.30	—
treated, 2.3% mineral oil, bgs., mines 100 lbs.		2.70	—
bbls., mines 100 lbs.		3.85	—
10% pine tar, bgs., mines. 100 lbs.		3.90	—
Dichloride, dms., c.l., works, frt. equald	lb.	.04	—
l.c.l. same basis	lb.	.04¾	—
tanks, same basis	lb.	.03¾	—
Dioxide, liq., coml., cyls., works, frt. equald	lb.	.10	.12
multi unit cars, works	lb.	.0535	—
tanks, works	lb.	.045	—
refrigeration, 150-lb. cyls., dlvd	lb.	.30	—
Monochloride, 55-gal., dms., c.l., frt. equald	lb.	.04	—
l.c.l. same basis	lb.	.04¾	—
tanks, same basis	lb.	.03¾	—
Sumac leaves 28%, bgs., ex-dock,	ton.	132.00	—
ground, bgs., ex-dock	ton.	127 00	—
Superphosphate, run-of-pile, under 22% a.p.a pulv., bulk, c.l., Balto., unit-ton.		.88	.91
Carteret, N. J. unit-ton.		.88	.91
triple 48% or more, a.p.a., pulv., bulk c.l., East Tampa, Fla. unit-ton.		.98	—

T

2,4,5-T, dms., c.l., works, frt. equald.	lb.	1.18	—
l.c.l., same basis	lb.	1.25	—
Isopropyl ester, dms., c.l., works, frt. equald	lb.	1.24	—
l.c.l., works	lb.	1.29	—
Talc, dom., ord., Calif., grd., bgs., c.l., works	ton.	32 00	-38 50
Vermont off color grd., bgs., c.l., works	ton.	18.40	—
l.c.l. works	ton.	36 00	—
fibrous, New York, grd., bgs., c.l., works	ton.	27.00	—
l.c.l., works	ton.	30 00	-35 00
99.5%, 325 mesh, bgs., c.l., works	ton.	30.00	—
l.c.l., works	ton.	33.00	—
99.95% micronized, bgs., works	ton.	37.00	—
imp., Canadian, grd., bgs., c.l., mines	ton.	20 00	35 00
Tallow, edible, tanks, dlvd	lb.	.09	.09¼
inedible, extra, tanks, dlvd	lb.	.07	—
fancy, bleachable, tanks, dlvd.,	lb.	.07½	—
guaranteed, dms., f.a.s.	lb.	.09	—
No. 1, tanks, dlvd	lb.	.06¾	—
special tanks, dlvd	lb.	.06¾	—
sulfonated, 25%, bbls., l.c.l	lb.	.08¾	.09
50%, bbls., l.c.l	lb.	.09¾	.10¼
Tankage, animal, feeding, 9-11% ammonia, bulk	unit-ton.	4.00	—
Chicago, bulk	unit-ton.	5.00	—
Tapioca flour, Brazilian, bgs., ex whse	lb.	.07¾	.08¼
Siamese, top grade, bgs., ex whse	lb.	.07½	.07¾
Tar acid oil, 15-18%, dms., c.l., frt. equald	gal.	.47	.49
l.c.l., same basis	gal.	.50	.51
tanks, same basis	gal.	.39	—
25-28%, dms., c.l., same basis,	gal.	.54	.56
l.c.l., same basis	gal.	.57	.58
tanks, same basis	gal.	.46	—
50-53%, dms., c.l., same basis,	gal.	.70	.72½
l.c.l., same basis	gal.	.73½	.74½
tanks, same basis	gal.	.62½	—
Coal (see Coaltar)			
Tartar emetic (see Antimony-potassium tartrate)			
Terpine glycol ether, dms., c.l., works	lb.	.23½	—
l.c.l., works	lb.	.25½	—
tanks, works	lb.	.22	—
Hydrate, NF, cryst., powd., fib. dms	lb.	.67½	.74
Terpineol, dms., l.c.l, dlvd. E	lb.	.20¾	—
extra, dms	lb.	.41	.50
prime, dms	lb.	.30	.45
Terpinyl acetate, extra, cns., dms.	lb.	.60	.75
prime, dms	lb.	.55	.70
Propionate, dms	lb.	1.75	2.00
Terra alba (see Gypsum).			
Testosterone, USP, 100-gm. lots, bots.	gram.	.70	—
Propionate, USP, 100-gm. lots, bots	gram.	.68	—
Tetrachloroethane, dms., works	lb.	.14½	—
Tetrasodium pyrophosphate (see Sodium pyrophosphate).			
Tetrachloroethylene, tech (see Perchloroethylene).			
USP 55 gal. dms., works	lb.	.20½	.21½
smaller dms., works	lb.	.23½	.25
Tetraethyl orthosilicate, dms., c.l., dlvd. E	lb.	.61½	—
l.c.l., dlvd. E	lb.	.62½	—
Pyrophosphate, 40%, cns., dms., frt. equald	lb.	.75	—
Tetraethylenepentamine, dms., c.l., dlvd. E	lb.	.49	—
l.c.l., dlvd. E	lb.	.50	—
tanks, dlvd. E	lb.	.47	—
Tetrahydrofuran, dms., c.l., or t.l., works	lb.	.36½	—
l.c.l., or t.t.l., works	lb.	.37	—
tanks, works	lb.	.35	—
Tetrapotassium phosphate (see Potassium phosphate).			
Thallium metal, dlvd	lb.	12.50	-15.00
Sulfate, 99%, bots., dlvd	lb.	8.00	-13.00
Theobromine, NF, fib. dms	lb.	3.25	—
And sodium acetate USP, fib. dms	lb.	4.00	—
Sodio-Salicylate, NF, fib. dms	lb.	3.30	—
Theophylline, anyhd or USP, 100-lb. dms	lb.	3.65	—
Thiamine hydrochloride USP, regular or ampul type fib dms.			
lar fib. dms	kilo.	60.00	—
Ampule grade	kilo.	62.00	—
Mononitrate, USP, fib. dms	kilo.	62.00	—
Thiocarbanilide, dms. ton lots	lb.	72	—
less tons lots	lb.	74	—
Thiodiphenylamine (see Phenothiazine).			
Thiourea, tech., dms., c.l., frt. alld. works	lb.	.36	—
l.c.l., works	lb.	.38	—
Thorium nitrate, purit., fib dms., 100 lb lots or more, works	lb.	3.50	—
dl-Threonine bots., 1-kilo lots,	kilo.	450.00	500.00
Thyme leaves, French, bgs	lb.	.19	.22½
Spanish, bgs.	lb.	.09	—
Thymol, fib, dms	lb.	2.25	2.35
Iodide, NF, dms	lb.	7.30	—
Timbo root (see Cube root)			
Tin chloride (see Stannous chloride, anhydrous) crystals (see Stannous chloride, hydrous)			
Metal (Straits)	lb.	1.01	—
Oxide (see Stannic oxide).			
Sulfate (see Stannous sulfate).			
Tetrachloride anhyd. (see Stannic chloride, anhydrous).			
Titanium dioxide anatase, chalk-resistant, bgs., c.l., dlvd	lb.	.24½	—
l.c.l., dlvd	lb.	.25½	—
ceramic, bgs., c.l., dlvd	lb.	.22½	—
l.c.l., dlvd.	lb.	.23½	—
reg., bgs., c.l., dlvd	lb.	.22½	—
l.c.l., dlvd	lb.	23½	—
metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla.	ton.	120.00	—
Niagara Falls, N. Y., c.l.,	ton	137 50	—
5-ton lots	ton.	142.50	—
ton lots	ton.	147 50	—
rutile nonchalking, bgs., c.l., dlvd. E	lb.	.26½	—
l.c.l., dlvd E	lb.	.27½	—
Milled titanium dioxide per ton higher	$7.50		
Hydride, cns., works	lb.	7.95	9.00
Pigment, calcium-rutile base, reg., bgs., c.l., dlvd	lb.	.09¼	—
l.c.l., works	lb.	.09¾	—
high-tinting, dms., c.l	lb.	.09	—
l.c.l.	lb.	.09½	—
Tetrachloride, tech., dms., c.l., works	lb.	.40¾	—
l.c.l. works	lb	43¾	—
tanks, works	lb	39¾	—
dl-a Tocopherol, bots	kilo	149 65	—
Acetate	kilo.	136.00	—
d-a-Tocopherol acetate	kilo.	185.00	—
d-a-Tocopherol acid succinate	kilo.	165.00	—
o-Tolidine base, dry or paste, 100% basis, kgs	lb.	1.40	—
Hydrochloride, paste, 100% basis.	lb.	1.35	—
Tolu balsam, cns	lb	4.25	4.50
Toluene (see Toluol).			
p-Toluenesulfonamide, powd., dms., works	lb.	70	—
m-Toluidine dms. c.l. works, frt. alld	lb	79	—
l.c.l. same basis	lb	80	—
tanks, same basis	lb	78	—
o-Toluidine, dms., c.l., works, frt. alld	lb.	23	—
l.c.l. same basis	lb	24	—
tanks, same basis	lb	22	—
p-Toluidine flake, dms., frt. alld	lb.	64	—
solid, dms. frt alld	lb	60	.61
Toluol coaltar indust or nitration, tanks, works:-			
Bethlehem Pa	gal.	34	—
Birmingham dist	gal.	32	—
Chicago, dist	gal.	32	—
Cleveland dist.	gal.	32	—
Geneva, Utah	gal	26	—
Johnstown Pa.	gal.	32	—
Lackawanna N Y	gal.	35	—
Lone Star Tex	gal.	33	—
Lorain Ohio	gal.	32	—
Middletown Ohio	gal.	33½	—
Minnequa Colo	gal.	32	—
Philadelphia dist	gal.	34	—
Pittsburgh dist	gal.	32	—
Sparrows Point Md	gal.	34	—
Terre Haute Ind	gal.	35	—
Youngstown Ohio	gal.	32	—

look...

it's

TITANOX®

Yes, it's the white pigment that helps make a finish that dreams are made on. TITANOX-RA-50 and TITANOX-RA-NC are the chalking-resistant rutile titanium dioxides that make white and pastel dream finishes practical.

Titanium Pigment Corporation (subsidiary of National Lead Company), 111 Broadway, New York 6, N. Y.; Atlanta 5; Boston 6; Chicago 3; Cleveland 15; Houston 2; Los Angeles 22; Philadelphia 3; Pittsburgh 12; Portland 14, Ore.; San Francisco 7. In Canada: Canadian Titanium Pigments Limited, Montreal 2; Toronto 1.

3871-A

Toluol, Coaltar—Wattle Bark

Toluol, coaltar, petroleum, indust., 2°, tanks, works:—Albany, N.Y. gal. .35 • —
Bayonne, N. J. gal. .34 • —
Baytown, Tex. gal. .33 • —
Chicago, Ill. gal. .38 • —
Detroit, Mich gal. .35 • —
Houston, Tex gal. .33 • —
Philadelphia, Pa. gal. .34 • —
Providence R. I. gal. .35 • —
Wood River Ill. gal. .35 • —
2,4-Tolylenediamine, cryst., fib. dms., c.l., frt. alld lb. .97 • —
l.c.l., frt. alld lb. 1.00 • —
powd., fib. dms., same basis lb. 1.00 • —
Tonka beans, Angostura, cks lb. 1.65 • 1.80
Brazilian, Surinam, cs lb. 1.00 • 1.25
Totaquine, 100-oz. lots, cns oz. .42 • —
Toxaphene, dms., c.l., t.l., works. lb. .20 • —
l.c.l., l.t.l., works lb. .26 —
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 • —
l.c.l., same basis lb. .40 • —
tanks, same basis lb. .37 • —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .42 • —
l.c.l., frt. alld. E. of Denver. lb. .43 • —
tanks, frt. alld. E. of Denver. lb. .40 • —
Phosphate, dms., c.l., works lb. .52 • —
l.c.l., same basis lb. .53 • —
tanks, same basis lb. .50 • —
Tributylamine, dms., c.l., works lb. .67 • —
l.c.l., same basis lb. .68 • —
tanks, same basis lb. .65 • —
Trichlorobenzene, dms., c.l., frt. alld. E lb. .14½- —
l.c.l., frt. alld. E lb. .15½- —
tanks, frt. alld. E lb. .13 • —
Prices in the West 1¾c. higher.
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .11¾- —
l.c.l., dlvd. E lb. .13¾- —
tanks, works, frt. equaid lb. .10¾- —
1,1,1-Trichloroethane, dms., c.l., works lb. .14 • —
works lb. .13½- —
l.c.l., works lb. .16½- —
tanks, works lb. .12½- —
Tricholine citrate, 65% soln., ret. cbys., works, frt. adjusted lb. 1.40 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd. lb. .36½- —
l.c.l., dlvd lb. .37½- —
tanks, dlvd lb. .34½- —
petroleum, dms., c.l., dlvd lb. .36½- —
l.c.l., dlvd. lb. .37½- —
tanks, dlvd. lb. .34½- —
Triethanolamine, dms., c.l., dlvd. E lb. .24 • —
l.c.l., same basis lb. .25 • —
tanks, same basis lb. .22 • —
Triethylamine, dms., c.l., works, dlvd. E lb. .47 • —
tanks, same basis lb. .45 • —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .45¾- —
l.c.l., frt. alld. E. of Denver, lb. .46¾- —
tanks, frt. alld. E. of Denver, lb. .43¾- —
Phosphate, dms., c.l., dlvd. lb. .40 • —
l.c.l., dlvd. lb. .41 • —
tanks, same basis lb. .38 • —
Triethylene glycol, dms., c.l., dlvd. E lb. .20½- —
l.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .49 • —
l.c.l., dlvd. E lb. .50 • —
tanks, dlvd. E lb. .47 • —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .22¾- —
l.c.l., dlvd. E lb. .23¾- —
tanks, dlvd. E lb. .20¾- —
Trimethylamine 25-40% soln., dms., c.l., works, frt. equald., 100% basis lb. .42 • —
l.c.l., works, frt. equald, 100% basis lb. .42½- —
tanks, works, frt. equald, 100% basis lb. .33 • —
Trioxane, pure, dms., c.l., t.l., dlvd. E lb. .50 • —
l.c.l., dms., dlvd. E lb. .51½- —
Tripentaerythritol, bgs., l.c.l., works. lb. .35 • —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .40 • —
l.c.l., frt. equald lb. .41 • —
Triphenylguanidine, bbls., works lb. .90 • —
Tripropylene glycol, dms., c.l., frt. alld E lb. .20½- —
l.c.l., frt. alld. E lb. .21½- —
Prices 1c. per lb. higher in West.

Trisodium fluoroacetate (see Sodium fluoroacetate, tribasic).
Phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, fib. ctns., works. kilo.165.00 • —
Tungsten metal powd., 98.8%, dms., dlvd. lb. 4.50 • —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Tyrothricin, USP, bots. gram. .75 • .85

U

Unicorn root, false (see Helonias root).
True (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E. ton.120.00 • —
l.c.l., dlvd. E. ex whse. ton.140.00 • —
45% N, agricultural, bgs., c.l., (30 tons), dlvd., E. ton.105.00 • —
Urea-ammonia liquor, A and B grades, N basis, tankcars, Belle, W. Va ton.126.00 • —
C grade, tankcars, same basis. ton.124.50 • —
37 grade tankcars, same basis. ton.153.00 • —
Urethane, USP, dms. lb. 1.50 • —
Uva-ursi leaves, bls. lb. .12 • .14

V

Valerian root, Belgian, bgs. lb. .38 • .40
dl-Valine, dms., works lb.21.00 27.50
Valonia beards, 40-42% tannin, bgs., exdock ton.77.00 -78.00
cups, 28-30% tannin, bgs., ex-dock ton.56.00 -57.00
extract, powd., 63% tannin, bgs., ex-dock, duty extra lb. .08 • —
Vanadium pentoxide, tech., dms., works lb. 1.28 • 1.33
Vanilla beans, Bourbon, tins lb. 6.00 • 6.50
Mexican, cuts, tins lb. 6.75 • 7.00
whole, tins lb. 7.50 • 8.00
Tahiti, cs. lb. 6.00 Nom.
Vanillin, ex eugenol, tins, 25-lb. lots. lb. 6.50 • 6.75
smaller lots lb. 6.90 • 7.25
ex lignin, dms., 25-lb. lots lb. 3.00 • —
smaller lots lb. 3.05 • 3.15
Vinyl acetate monomer, 55-gal. dms., c.l., dlvd. E lb. .18½- —
l.c.l., dlvd. E lb. .19½- —
tankcars, dlvd. E lb. .16½- —
tanktrucks, less than 4,000 gal., dlvd. E lb. .17½- —
n-Butyl ether, tech., dms., c.l., works lb. .28 • —
l.c.l., works lb. .30 • —
tanks, works lb. .27 • —
Chloride monomer, tanks, works lb. .11 • —
Ether, USP, anasthesia, bots., 50 c.c., hospitals, bot 1.12 • —
75 c.s. bot. 1.56 • —
tech., dms., c.l., works lb. .26 • —
l.c.l., works lb. .28 • —
tanks, works lb. .25 • —
Isobutyl ether, tech., dms., c.l., works lb. .28 • —
l.c.l., works lb. .30 • —
tanks, works lb. .27 • —
Methyl ether, cyls., works lb. .23 • —
tanks, works lb. .20 • —

Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period, full refund is made.

Trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.40 • —
1 to 9 dms, works lb. 1.50 • —
tanks, works lb. 1.38 • —
Vinyltoluene, dms., c.l., frt. alld lb. .18½- —
l.c.l., frt. alld lb. .19½- —
tasks, frt. ald lb. .16½- —
Viosterol, in alcohol, 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units. .025 • —
lots of 1 billion USP units, 1,000,000 units. .03 • —
lots of less than 1 billion USP units 1,000,000 units. .035 • —
in nat., vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02 • .04¾
lots of 1 billion USP units, 1,000,000 units. .025 • .05¼
lots of less than 1 billion USP units, 1,000,000 units. .03 • .05¾
Vitamin A acetate, syn., crystalline, beads, 500,000 A units per gram gram. .07¼- —
dry, 500,000 units per gram kilo lots kilo.67.50 • —
325,000 units per gram, same basis kilo.43.88 • —
250,000 units per gram, same basis kilo.33.75 • —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
liq., in oil, 1,000,000 A units per gram 1,000,000 units. .10 • —
Palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 • —
in oil, 1,000,000 A units per gram 1,000,000 units. .10 • —
B_1 (see Thiamine hydrochloride).
B_2 (see Riboflavin).
B_c complex, natural (see Rice bran concentrate and Yeast).
B_{12}, crystalline, 1-gram or 5-gram vials gram.245.00 • —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram.185.00 • —
C (see Acid, ascorbic).
D (see Oils, codliver and fish-liver, Calciferol, and Viosterol).
D_2, dry, 850,000 units per gram, kilo lots kilo.42.50 • —
less than kilo lots kilo.45.00 • —
E (see a-Tocopherol and Oil, wheat germ).
G (see Riboflavin).
H (see Biotin)
K, Active (see Menadione).
K_1, 25 gram bots gram 4.50 • —
Violet methyl toner (see Blue methylviolet toner
V.M.&P. naphtha (see Petroleum naphtha).

W

Wahoo root, bark, bls. lb. 2.25 • —
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 • —
25-49-lb. lots, N. Y. or Chicago. lb. 2.05 • —
5-24-lb. lots, cns., N. Y. or Chicago lb. 2.15 • —
Wattle bark, fair average, African, bales, ex dock ton.99.00 • —
merchantable, bales, ex dock ton.96.00 • —
extract, liq., 35% tannin, bbls lb. .09¾- .10
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra lb. .09¾- —
S. Africa, 60% tannin, bgs., ex dock, duty extra lb. .10 • —

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Central American, bgs. lb. .68 - .70
Chilean, bgs. lb. .70 Nom
refd., USP, bleached, white bricks, 100-lb. ctns. lb. .80 - .82
slabs, 100-lb. ctns. lb. .79 - .81
yellow bricks, 100-lb. ctns. lb. .73 - .75
slabs, 100-lb. ctns. lb. .72 - .74
Candelilla, crude, bgs. lb. .55 - .57
refd., bgs. lb. .58 - .60
Powdered candellila, 20 mesh, 7c. per lb. higher, 80 mesh, 7c.; 100-200 mesh, 8c.
Carnauba, chalky, bgs., ton tots. lb. .57 Nom.
North country No. 2, bgs., ton lots lb. .65 Nom.
pure refd., bgs., ton lots. lb. .71 - .73
No. 3, Ceara, crude, bgs., ton lots lb. .58 - .59
refd., pure, bgs., ton lots lb. .65 - .66
tech., bgs., ton lots lb. .61 - .62
Parnahyba, crude, bgs., ton lots lb. .59 - .61
refd., pure, bgs., ton lots lb. .67 - .68
yellow No. 1, Ceara, bgs., ton lots lb. 1.08 - 1.10
Parnahyba, bgs., ton lots lb. 1.10 - 1.12
Powdered carnauba wax price differentials same as powdered candelilla.
Japan, cs lb. .47 - .48
Microcrystalline, 170-175°F., m.p. ASTM, penetration 15-20 ctns., 20,000 lbs., group 3, works. lb. .14 - .15
smaller lots, same basis. lb. .15 - .16
black, ctns., 20,000 lbs., same basis lb. .12½- .13½
smaller lots, same basis. lb. .13½- .14½
white, ctns., 20,000 lbs., same basis lb. .25 - .26
smaller lots, group 3, works lb. .26 - .27
180°-185°F. m.p., ASTM, penetration, 7-11; amber, ctns., 20,000-lb. lots, same basis. lb. .17 - —
smaller lots, same basis. lb. .18 - —
black, ctns., 20,000 lbs., same basis lb. .15½- —
smaller lots, same basis. lb. .16½- —
white, ctns., 20,000 lbs., same basis lb. .28 - —
smaller lots, same basis. lb. .29 - —
100°-195°F., m.p., ASTM, penetration 2-7, amber, ctns., 20,000 lbs., same basis lb. .21 - —
smaller lots, same basis. lb. .21½- —
black, ctns., 20,000 lbs., same basis lb. .19 - —
smaller lots, same basis. lb. .19½- —
white, ctns, 20,000 lbs., same basis lb. .34½- —
smaller lots, same basis. lb. .35½- —
Montan, dom., refd., bgs. lb. .27 Nom.
imp., crude, Bohemian, bgs. lb. No prices.
German, bgs. lb. No prices.
Ouricury, refd., pure, bgs. lb. .77 - .79
tech., bgs. lb. .74 - .76
Paraffin (see P).
Spermaceti, blocks, cs. lb. .30 - .33
cakes cs. lb. .31 - .34
Sugar cane, dom., refd., slabs, 80 lbs. ctns., works lb. .65 - .75
spot lb. .67¼- .72¼
White lead (see Lead, White).
White pine bark, rossed, bls. lb. .18 - .19
White precipitate, USP, powd., dms., lb. 6.55 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls. lb. .18 - .19
rossed, bls. lb. .19 - .22
Witch hazel, bark, bls. lb. .16 - .17
leaves, bls. lb. .20 - —
Wollastonite, fine, bgs., c.l., works. ton 39.50 - —
l.c.l., ex whse. ton 56.00 - —
medium, bgs., c.l., works. ton 27.00 - —
l.c.l., ex whse. ton 44.00 - —
Woolfat, crude (see Degras).
USP (see Lanolin).
Wormseed, American, bgs. lb. .20 - .25
Levant, bgs. lb. 4.25 - 4.50

X

Xylene (see Xylol).
Xylenol, cryst., 58°-60°C., m.p., dms., l.c.l., works lb. .40 - —
56°-58°C., dms., l.c.l., works, frt. equald lb. .30 - —
45°-47°C., dms., c.l., same basis. lb. .212 - —
l.c.l., same basis lb. .215 - —
tanks, same basis lb. .199 - —
fraction, b.r. 7°-9°C., dry above 227°C., dms., c.l., same basis. gal. .96 - —
l.c.l., same basis gal. .99 - —
tanks, same basis gal. .85 - —
dry at or below 227°C., dms., c.l., same basis gal. 1.11 - —
l.c.l., same basis gal. 1.14 - —
tanks, same basis gal. 1.00 - —
Xylidines, mixed, o-m-p, dms., c.l. or t.l., works lb. .39 - —
l.c.l., same basis lb. .40 - —
tanks, same basis lb. .38 - —
Xylol, coaltar, indust., tanks, works:—
Bethlehem, Pa. gal. .34 - —
Birmingham dist. gal. .32 - —
Chicago dist. gal. .35 - —
Cleveland dist. gal. .34½- —
Geneva, Utah. gal. .27 - —
Johnstown, Pa. gal. .33 - —
Lackawanna, N. Y. gal. .35 - —
Lone Star, Tex. gal. .33 - —
Lorain, Ohio gal. .33 - —
Middletown, Ohio. gal. .34 - —
Minnequa, Colo. gal. .34 - —
Philadelphia dist. gal. .34 - —
Pittsburgh dist. gal. .32 - —
Sparrows Point, Md. gal. .34 - —
Terre Haute, Ind. gal. .35 - —
Youngstown, Ohio. gal. .32½- —
petroleum, indust., tanks, works:—
Bayonne, N. J. gal. .34 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Philadelphia, Pa. gal. .34 - —
Providence, R. I. gal. .35 - —
Wood River, Ill. gal. .35 - —

Y

Yara yara, ctns. lb. 2.15 - 2.65
Yeast, brewer's, dry, USP, 50 Int'l B units per gram, 100-lb. dms lb. .47 - —
90 int'l B units per gram, 100-lb dms lb. .52 - —
260 int'l B units per gram, 100-lb. dms lb. .56 - —
300 int'l B units per gram, 100-lb. dms. lb. .60 - —

Yellow, barium chromate, CP, bbls., dlvd N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul. lb. .35 - —
Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below.
Benzidine, AAA, bbls., dlvd. lb. 2.10 - —
AAOT, bbls., dlvd. lb. 2.85 - —
Lightfast, bbls., dlvd. lb. 3.15 - —
Cadmium, CP, all shades, bbls., frt. alld. E. of Rockies. lb. 2.85 - —
Cadmium selenide lithopone, all shades, bbls., frt. alld. E. of Rockies. lb. 1.15 - —
Cadmium yellows, Los Angeles and San Francisco, ex whse., 1c. per lb. higher.
Chrome, CP, bbls., dlvd. N. of Tenn., and N.C., E. of Miss., including Davenport, Minneapolis, Rock Island. lb. .33 - .33½
Dlvd. Ala., Fla., Ga., La. (Shreveport 1¼ higher); Miss., N. C., S. C., Penna., Dallas, Tex. 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.
Hansa, 10 g, bbls., same basis as yellow, chrome. lb. 2.10 - —
G pigment, bbls. lb. 1.91 - —
Iron oxide, natural, French type, bgs., c.l., works. lb. .05¼- —
Peruvian type, bgs., l.c.l. lb. .0205- .0355
pure, bgs., c.l., works. lb. .11½- —
l.c.l., works. lb. .11¾- —
Yellow, mercury oxide, bbls., 1,000-lb. lots. lb. 5.58 - —
smaller lots. lb. 5.60 - —
Ocher (see Yellow, iron oxide, natural).
Zinc (chromate), bbls., dlvd. lb. .27 - .27½
basic, dlvd. lb. .31 - —
Yerba santa leaves, bls. lb. .40 - .42
Yohimbine hydrochloride, bots, tin. oz. 4.30 - 4.50

Z

Zein, bgs., 36,000-lb. lots or more lb. .38 - —
1,000 to 36,000-lb. lots, works lb. .40 - —
smaller lots, works. lb. .43 - —
Zinc acetate, NF VIII, dms. lb. .53 - —
tech., dms., works. lb. .27 - —
Borate, bgs., c.l., dlvd. E. lb. .192 - —
l.c.l. dlvd E. lb. .202 - —
Chloride, NF, gran., dms. lb. .42 - —
precipitated, powd., dms. lb. .26 - —
soln., 50%, dms., c.l., works. 100 lbs. 5.50 - —
l.c.l., works. 100 lbs. 6.10 - —
tanks, works. 100 lbs. 4.85 - —
tech., fused, dms., c.l., works. 100 lbs. 10.10 - —
l.c.l., works. lb. 10.60 - —
gran., fib. dms., c.l., works. 100 lbs. 10.85 - —
l.c.l., works. 100 lbs. 11.35 - —
Chromate (see Yellow, zinc).
Zinc Cyanide, kgs., 1,000-lb. lots or more, works lb. .523 - —
smaller lots, works lb. .543 - —
Dust, pigment, bbls., c.l., works. lb. .17½- —
l.c.l., works lb. .18½- —
Fluoride bbls., works lb. 49 .50
Hydrosulfite, dms., c.l., frt. alld lb. .21½- —
l.c.l., frt. alld lb. .22 - .37½
Metal, prime western slabs, E. St. Louis lb. .13½- —
New York lb. .14 - —
Naphthenate, liq., 8% Zn., dms., frt. alld lb. .24½- —
10% Zn. dms. frt. alld lb. .30 - —
Oxide pigment, American process, lead-free, bgs., c.l., frt. alld lb. .14½- —
l.c.l., same basis lb. .15½- —
leaded, 35%, bgs., c.l., mills, frt. alld lb. .15½- —
l.c.l., same basis lb. .16½- —
50%, bgs., c.l., same basis lb. .15⅞- —
l.c.l., same basis lb. .16⅞- —
French process, coml., green seal, bgs., c.l., frt. alld lb. .15¾- —
l.c.l., same basis lb. .16¾- —
red seal, bgs., c.l., same basis lb. .15¼- —
l.c.l., same basis lb. .16¼- —
white seal, bgs., c.l., same basis lb. .16¼- —
l.c.l., same basis lb. .17¼- —
USP, ctns., c.l., frt. alld. lb. .17¼- —
l.c.l., same basis lb. .18¼- —
Zinc oxide Pac. coast prices 1c. higher.

—Continued on page 47

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Is FDA Running Out of Bounds

There is a growing feeling in the drug industry that the Food and Drug Administration is going beyond its statutory boundaries. It is quite evident that that governmental regulatory agency is expanding into various areas of pharmacological activity which have no bearing upon the objectives of any of the laws for which it was created or later authorized to administer.

Early manifestations of such expansion were presented in connection with its functioning with reference to antibiotics. They became quite clear when FDA began, several years ago, to hold an annual symposium on antibiotics which soon developed into a competitor of similar undertakings on the part of private organizations in several related scientific fields and eventually took over from them completely. Because a number of antibiotics are subject to governmental certification, the development of standards and tests for them was taken up by FDA. This was extended by way of the symposium in large measure to other antibiotics not subject to governmental certification, superseding in that area the Combined Pharmaceutical Contact Committee which has been working with the governmental agency on standards, tests, and other specifications for drugs for some thirty years. A similar advancing has been started in the field of medicated feeds.

Manufacturers, quite naturally, have been constrained to go along with the governmental agency in lanes of screening and other testing. There is no unanimity among them in that respect, but, individually they feel that it will be difficult to go against the grain with reference to the functioning of an agency which holds regulatory power over the industry as a whole.

The question of where the FDA's venturing into scientific areas will eventually lead has been sharpened by the recent move of the National Cancer Service Center to engage the FDA division of pharmacology as a testing collaborator. There seems to be reason to believe that the arrangement will be made. It is to be noted that, in its appeal for funds for new and larger quarters, FDA cited a need for facilities for consultant work in cancer chemotherapy. The new work would comprise the toxicological and pharmacological screening of products of private medical research in various areas, not primarily or necessarily involving cancer problems.

Out of that procedure could come a very complex situation when a new therapeutic product which in some manner got into the channel of cancer research should be taken to FDA by its discoverer under the requirements on the new drugs, although for a purpose wholly unrelated to cancer. Under the new drug regulations, the toxicological evaluation of a product is the responsibility of its manufacturer.

There is reason for a wide difference of opinion among producers and members of the public over the desirability of government's taking over the functioning of private enterprise in the search for effective cancer therapy. But, it is difficult to find any logical support for such procedure on the part of a governmental agency whose functional reason for existence is the regulation of the providing of drugs for any therapeutic purpose. If such pharmacological activities must be socialized, nationalized, or governmentalized—by way of the HEW department as a matter of course—they should not be teamed up with the regulation of business in drugs; they should be placed with the Public Health Service.

Everybody Must Participate

It is not possible for the National Action Conference on the Hoover Reports, which will be held in Washington March 15, to have what it deserves in attendance and personal participation by representatives of business. But, it can be given much of what it needs in that connection if business groups and individuals in all parts of the country will participate by means of communications. The purpose of the conference should attract such participation by thousands, because it is highly desirable that a substantial popular vote be addressed to the federal legislators and executive officials who must put the Hoover reports to work. The ballots in that voting should be sent to the Chamber of Commerce of the United States, Washington 6, D. C. now.

The Hoover reports call for a deal of thorough, serious study by duly qualified analysts. It is to be hoped that the results of some such analysis have been available to business leaders who recognize the need for the action to which the Washington conference is to be directed. That hope does not rest alone upon the desirability that business leaders contribute now to the effectiveness of the conference. It lies closer home in the need that every federal legislator be made fully aware of the sentiment of his constituency and that that sentiment be properly cultivated by those who know what they are talking about—and how to say it.

It is not to be expected that there will everywhere, if anywhere, be anything like a close approach to agreement on the desirability of every aspect of every segment of the Hoover reports. But, the differences of opinion should be clearly presented inorder that they may be equitably evaluated. Such presentation has not always been characteristic of discussions of Hoover reports. A recent discussion of the so-called "isolation" of career personnel is a case in point. The distinctions made therein between political and administrative functioning were not, at least on the basis of published data, convincing or informative.

The extent to which politics affects administrative functioning, in policy and in practice, is one of the chief contributors to the blundering of governmental agencies. The fact that this country's policies stem largely from political roots is one of the reasons why they are frequently unsettled. Politics must be expected to loom large in foreign affairs; but it usually looms too large. Similar expectations lie in the direction of agricultural and labor affairs. They are a bit less with respect of commerce and natural resources—but politics is still there. Fortunately it has, for the most part, a minor role in affairs of justice, finance, health, education, and welfare. But, career personnel is not always as prominent in those areas as it should be.

The Hoover task forces covered a lot of ground. All in all, they did a good job of surveying. What they suggest should not be left for analytical discussion by but a few persons, no matter what their qualifications. The Hoover findings have to do with the federal government. That is something pertinent to every person in the United States. It is particularly pertinent to every person in business in the United States. The Hoover recommendations, therefore, are everybody's business. Making them do what they are intended to do and should do is everybody's job.

Bug-Battling Begins

Comes again the time of year when bug problems loom large in all plant-growing circles. And that is why those who look upon all aspects of plant-growing as matters of governmental concern and care are off on the annual demand for federal financing of the battling of the gypsy moth which is reported to be offering a seriously increased threat as it already advances rapidly southward and westward from New England. The congress has been asked to appropriate an additional $3,000,000 for an expanded spraying program this year and next. A bit more than $2,000,000 is reported to be available now in federal and state funds.

Representatives from seven states, ranging from New Jersey to Washington, started this year's move for moth-fighting money. Because the threat is clearly an interstate movement, the use of federal funds and facilities is well justified. That, of course, is not enough. Local campaigns must be locally supported—and operated. Federal and state guidance is available and should be used to the full. But, there is work to be done, and its doing is not a job for federal or state employees. It is largely a job for volunteers recruited where the need exists—a job of community self-help.

Obviously, like all other jobs in service of mankind, the job of breaking up the gypsy moth invasion has a big opening for business. There is a pesticidal business. This job's opening is for it, quite naturally. Its role is one of leadership, inspiration—and supplies; all of which must be sold to those who need them. So, the producers and distributors of pesticides face a challenge on how well they can do a very necessary job. They have made much progress with reference to supplies in recent years. Their research has provided a large volume of potentially inspirational data. It is not much of a job to get those data into the hands of plant-growers who need inspiration. Nor is it much of a job to provide the leadership essential to the effective application of that inspiration—and those supplies. But, those are the jobs now faced by the pesticidal industry.

One of the big parts of those jobs has to do with the selling of the idea that an adequate pesticidal program will pay. When sold in that respect, those who should adopt and apply such a program will find a means of financing their so doing. It is not even largely a matter of how much the federal, the state, or the local government will contribute. Most of those who are shown the seriousness of their need—they already can see much of that—and the practicability of effectively dealing with it still have a goodly share of the self-reliance long characteristic of those who grow plants.

The gypsy moth is one current threatener of preventable destruction. It is not the only one in the bug tribe that needs attention at this time. Another one, which seldom gets a full measure of the fighting that is coming to it, is the tent caterpillar. The army worm, the grasshopper, and others will come along a bit later. Now is the time to begin the planning and preparing of an adequate defense against them all.

Washington Talks It Over

President's Authority to Enter Into International Agreements Is Issue Heading for New Showdown in Senate This Year.

By Ralph L. Cherry
Chief, OPD Washington Bureau

The issue of the authority of the President to enter into treaties and international agreements which might restrict the powers of congress to legislate is heading for a new showdown in the senate this year. Whether it will reach a similar stage in the house, however, is problematical, but the chances are it will not.

The issue is raised by the so-called Bricker amendment to the federal constitution which has just been reported to the senate in a substitute form. It is simple and brief in text, but its possible effect on the negotiation of future international arrangements can hardly be underestimated. It says:—

"The provision of a treaty or other international agreement which conflicts with any provision of this constitution shall not be of any force or effect."

Next to the trade agreements program, this amendment to the constitution has probably aroused more interest in the chemical industry and in other industries concerned with international matters than has any other proposal in the international field. Because if adopted and made a part of the constitution, it might very well limit United States participation in many of the activities of the United Nations.

That the amendment has a great deal of support in congress as well as out is seen by the fact that it was approved by the senate judiciary committee by an overwhelming vote of 11-2. It requires a two-thirds majority vote to pass and there is a strong belief that this can be obtained. But in the house no move has been made to bring up the subject of the amendment, which is the reason why final action by congress this year is doubtful.

Terms for Washington

As an aid to those who must keep up with the doings of the government, Congressman Carl Hinshaw of California suggests that it might prove helpful to have the following glossary of terms pasted in the back of their note books:—

Channels: The trail left by interoffice memos.

Coordinator: The guy who has a desk between two expediters.

Consultant or expert: Any ordinary guy more than fifty miles away.

Under consideration: Never heard of it.

Under active consideration: We are looking in the files for it.

Committee: A means for evading responsibility.

Informed source: The guy who just told the guy you just met.

Unimpeachable source: The guy who started the rumor originally.

Make a survey: Need more time to think of an answer.

Note and initial: Spread the responsibility.

Clarification: Fill in the background with so many details that the foreground goes underground.

Check the files: Ask the janitor to look through yesterday's sweepings.

Finalize: Scratch gravel to cover errors.

Paytime in Dangerous Jobs

The chemical and allied industries will be interested in a recent decision of the Supreme Court of the United States relating to paytime for workers in dangerous occupations. The case was Steiner v. Secretary of Labor Mitchell, 76 Supreme Court Reporter 330.

Workers in a battery plant had to use dangerously caustic and toxic materials, and were compelled by circumstances, including vital considerations of health, to change clothes and shower in facilities which the employer was required by state law to provide.

The court decided such showering and clothes-changing were an integral part of the job and must be included as worktime under the portal-to-portal act.

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Heavy Chemicals

The 6 percent freight rate increase granted railroads immediately affected the prices of rock and table salt, which were increased two cents per hundredweight. The March 7 boost, which also affected truck freight rates (truckers were given a 7 percent increase), was expected to have little effect on the immediate future of other heavy chemical prices. The reason for this feeling in the trade was that most of the heavy chemicals are priced on an f.o.b. works basis.

Those items priced on a delivered basis were currently undergoing study as a result of freight rate increases.

Flake sodium sulfide, sodium sulfhydrate, and liquid 40 percent sodium tetrasulfide were increased by one producer effective today, in less carlot quantities only.

The copper market remained extremely strong last week owing primarily to pressure from the world market. Chilean and Rhodesian sources have asked for a higher price in this country.

The London market reached all time highs in copper trading. Increases in copper sulfate as a result of recently higher copper failed to dampen demand. Interest actually picked up, due to preparations for the oncoming agricultural season.

Chlorine and the alkalies continued to move briskly. Chlorine continued to show signs of an easing supply. Solid forms of caustic were also said to be in a more favorable reserve.

Recent cutbacks in auto output failed to affect demand for chromic acid, which, according to the trade, is usually very sensitive to fluctuations in the auto industry.

Demand for the mineral acids continued strong in the heavily industrialized areas of the northeast and midwest. Continuing strong steel, rayon and chemical output were held responsible for the good demand.

The American Paper and Pulp Association reported production for the week ended March 3 at 100.0 percent of theoretical capacity, as compared with the revised figure of 101.1 percent for the previous week and 98.8 percent for the corresponding week of last year.

Price Trends

Advanced
Salt, rock, 2c. per cwt.
table, 2c. per cwt.

Reduced
Mercury, $2 per flk.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Mar. 10, 1955
101.19	101.24	101.20	98.44

For Current Prices see Page 9

Acid, Chromic — Demand for chromic acid continued steady, and trade sources considered this position remarkable in the face of recent automobile production cut backs.

It was indicated that chromic acid is usually one of the first chemicals to directly feel any rise or decline in production. So far, little or no effect has been noticed.

The freight increase granted railroads and trucking March 7 was expected to have little or no effect on pricing in the near future.

Acid, Hydrochloric—Northeastern producers reported continuing strong demand, necessitating capacity operations in some instances.

Buying interest in the midwest was also strong. Steel production, currently at a high rate, was a key factor in consumption. There were no indications of price changes.

The railroad and truck freight rate increase which went into effect last week was not expected to have much effect on pricing.

Acid, Hydrofluoric — Inquiry for stainless steel and other steel applications, as well as for glass industry use, fluorination of hydrocarbons, and government account, kept this market strong.

Acid, Nitric—Prices of long standing held without change. Buying interest continued active for all types. Red fuming nitric was moving well. Prices continued without change.

Acid, Sulfuric—Demand for steel, rayon, fertilizer, pigments, alcohols, and other end uses continued heavy. Prices of long standing held without change.

Steel production last week was estimated at 98.4 percent by the American Iron and Steel Institute, or 2,422,000 tons, as against actual output of 2,459,000 tons, or 99.9 percent of capacity the previous week, and an output of 2,241,000 tons the corresponding week a year ago.

Chlorine—Although demand remained at a good level, there were continuing indications that the supply position was easing up, compared to the tight situation which existed in earlier months.

While there were reports of local tight spots in the supply, these appeared to be more the exception than the rule last week, and several producers reported that they were able to take on new business.

Meanwhile, inquiry for bleaching of paper and textiles, manufacture of chlorinated hydrocarbons, and water and sewage treatment held to a high rate.

Copper Nitrate—Producers indicated that nitrate was moving at a good rate to consumers. Prices continued without change. The last price change in copper nitrate occurred October 6, 1953.

Since that time, the chemical has been maintained at 33¼c. per pound, drums, works, for technical crystals despite the fact that the price of copper metal has gone from 29c. to 46c. per pound in that time.

Copper Sulfate — Industrial demand continued to be active, and recent price increases due to the rise in copper metal were said to have had no adverse effect on inquiry.

Salt — Increased freight rates granted to the railroads by Interstate Commerce Commission necessitated a 2c. per hundredweight increase in both rock and table salt.

Rock salt was increased to $1.03 per cwt., bgs., carlots, and table salt, to $1.23 per cwt., same basis, metropolitan area.

Alkali manufacturers were of the opinion that the increase in salt prices would have little significant effect on operational costs in the manufacture of alkalies. Hence, no change was expected in those materials for which salt is a basic raw material.

Soda Ash—Movement of light and dense soda ash continued in good volume. Manufacture of flat glass was well maintained. It was indicated that despite current cutbacks in auto output, demand for glass was continuing to hold up strongly, due to depleted warehouse stocks.

Aluminum and phosphate production schedules were maintained at a strong pace, resulting in continued large volume call for light soda ash. This position also applied to paper, where production rates have been estimated at over 100 percent of capacity for the last few weeks.

Soda, Caustic — Buying interest was well sustained by rayon, paper, chemical and other applications. Supplies of some grades, including rayon liquids and some solid and flake types, were said to have become more plentiful during the past month.

Sodium Phosphates—Demand for the higher phosphates for use in manufacture of synthetic detergents was well sustained. No price

Heavy Chemicals

changes were contemplated following the freight rate increase granted railroads and truckers March 7.

Sodium Sulfate—Current supplies of sodium sulfate, near the 70,000-ton mark, were judged comfortable. Demand was said to have improved considerably during the past three months.

It was thought that the improvement was due to two key factors:—(1) Paper production has been running at above 100 percent of capacity, and (2) contracts with foreign sources, negotiated when saltcake was scarce, have been worked out.

There was some feeling in the trade that saltcake could again become scarce in the foreseeable future, based mainly on the current cutback in automotive production.

The theory among trade sources was that due to auto cutbacks, demand for neoprene, rayon tire cord, and chromic acid and bichromates would correspondingly decrease.

Since saltcake is a key byproduct in the process of producing all three items, output of saltcake would be expected to be correspondingly lower.

Meanwhile, it is expected that current demand for kraft paper, if maintained at its present record-breaking pace, as well as higher demands created by expansion of kraft pulp facilities, would serve to chew heavily into available saltcake supplies.

Sodium Sulfhydrate—Flake sulfhydrate less carlot quantities were newly quoted at 4½c. per pound, drums, effective today.

Sodium Sulfide — Flake sulfide less carlot prices were boosted to 6¼c. per pound, drums, effective today, by a producer.

Sodium Tetrasulfide — Liquid, in drums, was lifted to 4½c. per pound in less carlot quantities, effective today.

Nonferrous Metals

Aluminum—Purchased aluminum-base scrap consumed in October totaled 37,445 short tons an increase of 1,293 tons, or 3.6 percent compared with September, according to the Bureau of Mines.

Most of the increased consumption was new segregated 2S and 3S sheet and clips, new and obsolete alloy sheet and clips. Increased use also was reported in new cast scrap, dross and skimmings and old castings and forgings.

Copper — While prices were recently raised to 46c. per pound, delivered US destinations, by domestic producers, pressure to further raise prices continued to be exerted.

The Rhodesian Trust, as well as the Chilean minister of finance have urged strongly further increases of from 2c. to 5c. per pound.

The London market last week reached an all-time high of 54¼c. per pound. Custom smelters' prices in this country hovered around 53c.-54c. per pound, spot.

Mercury—Metal was lower last week, at $264 to $267 per flask, spot.

Silver—Bullion was priced at 91⅛c. per troy ounce, spot, on Friday.

Tin—Tin metal market fluctuated narrowly, ending easier, at $1.01¾ per pound, spot, for Straits metal.

The following figures, supplied by the American Zinc Institute, show production and stocks of zinc metal, in tons:—

Production	January	February
Special high grade	35,435	32,288
High grade	7,727	10,526
Intermediate	1,632	1,371
Prime western	45,511	42,200
Total	90,305	86,383

Stocks	January	February
Special high grade	6,014	6,622
High grade	1,098	1,911
Intermediate	801	607
Prime western	33,417	30,693
Total	41,330	39,833

Pfaudler Appoints Holcombe Chemical Equipment Mgr.

Appointment of Dewey R. Holcombe as manager of chemical equipment sales has been announced by Pfaudler Company, Rochester, N. Y. Mr. Holcombe will be in charge of sales of corrosion-resistant process equipment to the chemical and allied industries.

Mr. Holcombe was manager of the Detroit, Mich., sales office prior to his new appointment. He has been with the company since 1946, and formerly worked out of Rochester and at the Elyria division in Elyria, Ohio.

SOCMA to Hear Speech On Automation Technology

Dr. Charles R. DeCarlo, director of the applied science division of International Business Machines Corporation, will speak on automation and the chemical industry before the monthly luncheon meeting of the Synthetic Organic Chemical Manufacturers Association, at the Roosevelt hotel, New York, March 13.

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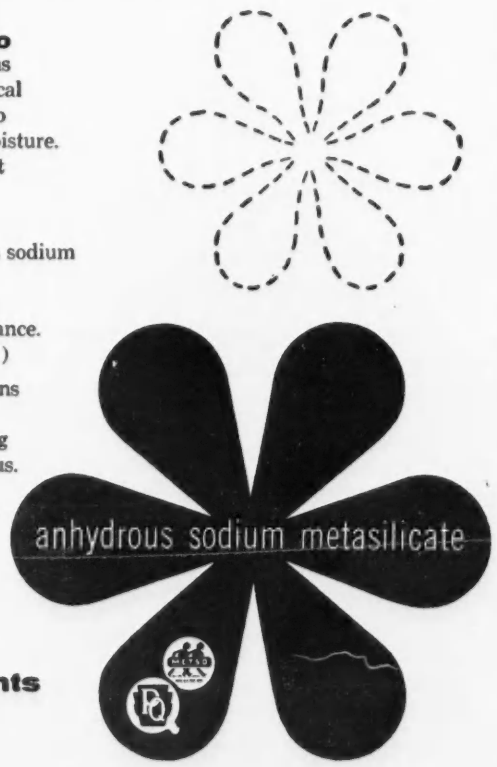

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Tungsten Price Prop Bills Are Introduced in Congress

Legislation has been introduced in the senate and house directing the government to continue the tungsten price support program for another three years.

Sponsors announced that they would press for early action by the interior committees to which the half-dozen identical bills were referred.

The current tungsten purchase program was inaugurated in 1951 by General Services Administration at the direction of Office of Defense Mobilization.

It is due to expire in a few months, but ODM has made no announcement whether it will be allowed to expire, or be continued. The legislation would take the decision away from ODM and make it a congressional directive.

The bills provide that the government purchase not to exceed 3,000,000 short-ton units of tungsten of domestic origin, at a price of not less than $63 per unit between the expiration date of the present program and June 30, 1959.

This is the same price at which GSA is currently purchasing tungsten. A short-ton unit means twenty pounds of tungsten trioxide, of which 15.86 pounds is contained tungsten metal.

Atlas Promotes Steele To Chemicals Unit Post

Atlas Powder Company, Wilmington, Del., has promoted Dr. Sydney Steele, formerly director of the planning staff, to the position of industrial assistant to Edward J. Goett, vice-president in charge of the company's chemicals division. His new duties will include assisting in the division's diversification planning and other special assignments.

The company also announced the establishment of an economic evaluations department in the chemicals division. The new department will conduct economic studies on all projects and expenditure programs for the division.

Robert J. Reilly has been appointed director of the new department. James Weaver and Frank Lyndall, jr., have also been assigned to it. At the same time it was announced that L. Hastings Lyon has been transferred to the newly-created marketing research section in the product development department. The section will conduct studies of present and potential markets for the chemicals division's products.

American-Marietta to Buy Presstite Engineering Co.

Directors of American-Marietta Company, Chicago, and Presstite Engineering Company, St. Louis, Mo., have agreed to the sale of Presstite's entire assets and business to American-Marietta.

Presstite stockholders will vote on the proposal at a special meeting to be held March 22. The deal involves the issuances of 90,000 common shares of American-Marietta, having a current market value of $4.5 million.

Presstite is a leading manufacturer of more than 400 specialized types of sealing, insulating and adhesive products, used mainly in the aircraft, automotive, refrigeration and air conditioning industries.

Solvay Appoints Meek General Traffic Manager

Appointment of Arlington R. Meek as general traffic manager of Solvay Process Division of Allied Chemical & Dye Corporation, New York, has been announced. Mr. Meek succeeds F. W. Brown, who has retired, after thirty years' service.

Solvay's new traffic manager has been with the company since 1927. During that period he was plant traffic agent at Detroit, Mich., and Baton Rouge, La., and assistant to the general traffic manager. In 1954, he was appointed assistant general traffic manager.

Tariff Chief Renamed

Edgar B. Brossard, present chairman of the Tariff Commission, was reappointed for an additional six-year term as commissioner, ending June 16, 1962, by President Eisenhower last week. The appointment is subject to senate confirmation.

Potassium Cyanide Solution Data Offered in New Koppers Bulletin

A new four-page bulletin, describing Koppers' potassium cyanide solution for use in electroplating applications, has been issued by the chemical division of Koppers Company, Pittsburgh, Pa. Specifically, the product is presented in the light of its economy, purity, ease of handling, safety, and quality control.

Designed to be of information to small, as well as large, plating operators, the new bulletin lists the applications of the product to the plating of automotive parts, appliances, silverware, surgical instruments, hardware, tools, and ball bearings, and certain custom plating operations.

Copies of the bulletin may be obtained by writing the chemical division, 1301 Koppers Building, Pittsburgh 19, and requesting bulletin C-6-227.

Carbide & Carbon Names 3 Assistant Sales Managers

R. L. Duncan, F. J. Rauscher, and E. R. Young have been appointed assistant sales managers for Carbide and Carbon Chemicals Company, New York, a division of Union Carbide and Carbon Corporation.

Mr. Duncan joined the company in 1937. He was appointed district manager of the Albany district in 1946 and of the Detroit district in 1949. In 1954 he was appointed eastern division manager.

Mr. Rauscher joined the company in 1935. After several years as district manager of the St. Louis district, he was appointed division manager of the southwestern division in April, 1954.

Mr. Young joined the company in 1935. He was appointed district manager of the Cleveland district in 1947 and of the central division in 1954.

Corn Products Elects

Corn Products Refining Company has elected William T. Brady, formerly first vice-president, to the position of president and chief executive officer. Mr. Brady succeeds Dr. E. W. Reid, who has been elected chairman of the board.

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RESEARCH VICE-PRESIDENT: Dr. Robert O. Sauer, appointed vice-president in charge of research and development for Velsicol Corporation, Chicago.

Union Carbide Makes Brown Its Director of Accounting

G. F. Brown has been appointed director of accounting for Union Carbide and Carbon Corporation, New York.

Mr. Brown joined Carbide in 1928 at the South Charleston, W. Va., plant of Carbide and Carbon Chemicals Company.

In 1942 he was made assistant office manager and the next year was transferred to the Corporation-operated atomic energy installation at Oak Ridge, Tenn., as office manager.

In 1945, he was transferred to the general accounting department in New York. He was appointed assistant manager of plant accounting for the corporation in 1950 and manager in 1953.

Food Machinery Appoints

Food Machinery & Chemical Corporation, San Jose, Calif, has appointed Henry A. Oldenkamp manager of central engineering. For the past eight years, Mr. Oldenkamp had been associated with American Machine & Foundry Company.

Sodium Fluoride Dentifrices Granted Easier Sale Rules

Dentifrices in powder form which contain sodium fluoride may be sold over-the-counter under terms of an amendment to regulations of the Food and Drug Administration dealing with prescription drugs.

Dental pastes containing fluoride previously had been taken off the prescription-only list and the powders are now placed in the same category.

The FDA announced its intentions to make this amendment in a proposed order printed in the *Federal Register* January 20. The same proposed order also stated the intentions of the agency to remove hydrocortisone and hydrocortisone acetate preparations from the prescription dispensing requirements. FDA said last week that no action is being taken on this matter at this time, however, and it is being given further consideration.

Dr. Schaefer to Retire; Brooklyn Pharmacy Dean

Dr. Hugo H. Schaefer, dean of Long Island University's Brooklyn College of Pharmacy, has announced plans to retire at the end of the school year. He will be succeeded by Dr. Arthur Zupko, currently associate dean.

Dr. Schaefer became dean of Brooklyn College of Pharmacy in 1937. Prior to the appointment he was with Columbia University. Dr. Zupko formerly was with Burroughs Wellcome & Co., Tuckahoe, N. Y., and was most recently on the faculty of St. Louis College of Pharmacy and Allied Sciences, St. Louis, Mo.

Armour Chemical Division Fills Two Managers' Posts

E. L. Rhoads has been appointed manager of the derivatives department of the chemical division of Armour and Company, Chicago. Mr. Rhoads succeeds R. R. Burns, resigned.

Karl M. Bierman was named manager of market development, succeeding Mr. Rhoads. He was formerly a chemical specialist in that department and before that was in the market research department.

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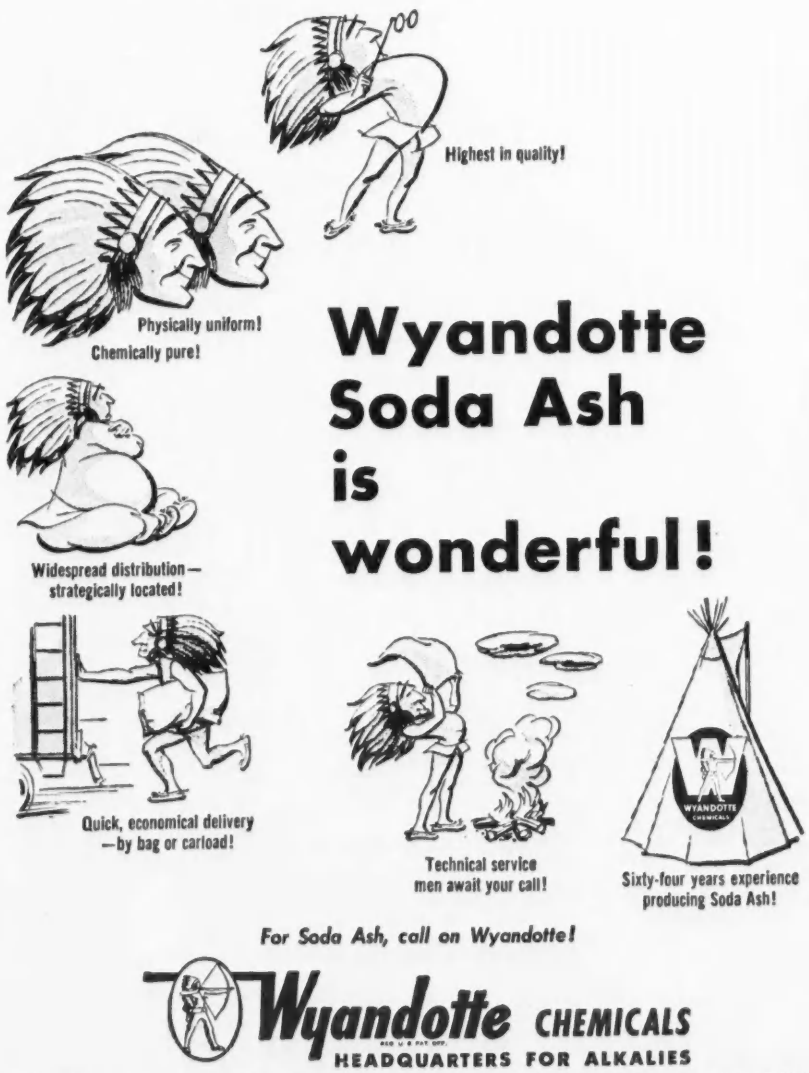
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Patent Holders May Get Relief in Congress Action

Patent holders who were unable to exploit their inventions because of limitations imposed on the use of materials by the government during the national emergency may get relief from congress this year. The enabling legislation has been passed by the house and sent to the senate for concurrent approval.

The bill, H.R. 2128, proposes to grant relief to owners of patents by authorizing the patent office to extend the life of the patent beyond its statutory seventeen years. The extensions would be issued on these three grounds:—

(1) Because of the service of the owner in the armed forces; (2) because of an order by a government agency which limited or prohibited production, and (3), because of the grant of royalty-free licenses to the United States, or at a nominal royalty, in order to promote the program for national defense.

The only controversial feature in the bill was its second provision allowing patent holders to get extensions on the life of their patents because of production limitation orders. This section was opposed by the American Patent Law Association, Department of Justice, and the Bureau of the Budget.

Pesticide Tolerance Dates Extended Further by FDA

Food and Drug Administration has announced a further extension of the effective dates when the tolerance requirements of the Miller pesticide law will become fully effective with respect to certain chemical pesticides.

The extensions involve non-seasonal uses, it was explained, and in some instances involve petitions which have recently been submitted but not yet processed by the agency.

The new effective date of May 1 was fixed for p-chlorophenyl p-chlorobenzene sulfonate on citrus, and for sodium o-phenylphenate on apples.

In the case of the following pesticides, the new effective date is July 22:—carbon bisulfide as a grain fumigant; carbon tetrachloride as a grain fumigant; ethylene dibromide as a grain fumigant; ethylene dichloride as a grain fumigant; malathion on citrus; and "MGK 264" in fly sprays.

Stanley Barnes Is Nominated For Circuit Court of Appeals

Assistant Attorney General Stanley N. Barnes last week was nominated by President Eisenhower to be judge of the United States Circuit Court of Appeals for the Ninth Circuit. Mr. Barnes had been head of the antitrust division of the Department of Justice since 1953.

The Ninth Circuit includes Arizona, California, Idaho, Montana, Nevada, Oregon and Washington, as well as Alaska and Hawaii. Mr. Barnes was judge of the Los Angeles County Superior Court prior to his appointment as assistant Attorney General of the United States. His successor for this post has not been selected as yet.

Dr. Scheele Nominated To Head PHS 3d Time

Dr. Leonard A. Scheele was nominated for a third four-year term as surgeon general of Public Health Service last week by President Eisenhower. The nomination is subject to senate confirmation.

The reappointment ended speculation as to Dr. Scheele's future status in the government. There had been rumors that he would be dropped by the administration to appease the critics of the early handling of the polio vaccine program by the administration.

Diamond to Double

—*Continued from page 5*

for process and power purposes, the new installation will include a new office building, laboratory and warehouse. The project also encompasses construction of facilities for loading barges in order that the products of the facility may take advantage of water transportation.

Another phase of the program provides for installation of new equipment and supporting facilities for producing ethylene dichloride, a chemical intermediate and component of grain fumigant mixtures.

Other projects to be pursued by Diamond concurrent with those slated for Deer Park are increasing production of agricultural chemicals at three locations (2,4-D at Newark, N. J., and Des Moines, Iowa; and DDT at the Greens Bayou plant, Houston, Tex.); installation of a new methane purification unit for processing chloromethanes at Belle, W. Va., and additional facilities for "Chlorowax," a chlorinated paraffin produced in resinous and liquid forms at Painesville, Ohio.

Soybean Output

—*Continued from page 7*

56 marketing year are large, world demand for edible oils and for oilseed cake and meal, also is strong, and soybean prices have increased materially since early fall 1955, when they were the lowest in 5 years.

United States exports of both beans and oil have been running higher than a year ago and are likely to continue large throughout the remainder of the current crop year.

With a shortage of vegetable oils reported in China, the extent to which the estimated increase in China's production will be reflected in exports is uncertain. Northbound shipments of Chinese soybeans through the Suez Canal increased roughly 50 percent in calendar 1955, reaching 17.8 million bushels in the first 11 months.

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Goodrich Company Post Goes to Marvin Larson

Marvin W. Larson has been appointed director of associated company relations for B. F. Goodrich Chemical Company, Cleveland, Ohio, Mr. Larson's primary function in his new assignment will be to implement the technological assistance contracts between BFG Chemical and its associated companies abroad. These include plants in Great Britain, Japan, Brazil, Mexico, and Canada.

Mr. Larson joined B. F. Goodrich in Akron, Ohio, in 1940. In 1941, he became a shift foreman in the company's Akron synthetic rubber production plant. In the following five years he fulfilled supervisory assignments at both Louisville, Ky., and at Port Neches, Tex., where synthetic rubber production was inaugurated.

In 1946 Mr. Larson joined BFG Chemical in Cleveland in the engineering department. In 1951 he was sent to Japan to supervise the design, procurement, installation and start-up of an associate polyvinyl chloride plant. He returned to this country in 1952 to supervise the design of BFG Chemical's new acrylonitrile plant at Calvert City, Ky. In 1955 he was named manager of project engineering, a position he retained until his present assignment.

Hooker's 'Hetron' Sales Put Under Durez Unit

Hooker Electrochemical Company, Niagara Falls, N. Y., has made its Durez Plastics Division sales department responsible for sales of "Hetron," Hooker's line of fire-resistant polyester resins, in addition to the "Durez" line of phenolic resins and molding compounds.

To facilitate the change, the "Hetron" sales group has been transferred from Niagara Falls to the Durez Plastics Division offices at North Tonawanda, N. Y. Charles Y. Cain, former manager of plastic sales for Hooker, has been appointed sales manager, Hetron polyesters.

Cyanamid Reassigns Borda

American Cyanamid Company, New York, has appointed John N. Borda senior market research analyst in its market research department. Mr. Borda joined Chemical Construction Corporation, a Cyanamid subsidiary, in 1942. Later, he transferred to the parent company's Stamford, Conn., research laboratories and then to its organic chemicals division.

National Propane Corp. To Acquire Bupane Gas

National Propane Corporation, New Hyde Park, N. Y., one of the country's largest distributors of liquefied petroleum gas to residential, commercial and industrial consumers, has concluded an agreement to purchase the assets of Bupane Gas Company.

The purchase price is to be $1,400,000, payable one-half in cash and one-half in an additional issue of National Propane second preferred stock. These new preferred shares, which present stockholders of National Propane are being requested to authorize at a forthcoming special meeting, will be convertible into common stock at $15 per share.

Bupane Gas operates in Iowa, northern Illinois and parts of southern Wisonsin, and at present has approximately 40,000 customers. The Bupane operation will be incororated into the Great Plains Gas Division of National Propane, a division which operates the LPG business recently acquired from Shell Oil Company.

National Propane, meanwhile, also has acquired a smaller company, formerly known as the South County Gas Company, of Wakefield, R. I.

Pesticide Tolerances Set

Tolerances for residues of thiram and lindane on certain raw agricultural crops were approved last week by the Food and Drug Administration. The tolerance for thiram was set a three parts per million in or on apples, and the tolerance for lindane was fixed at 10 parts per million in or on mushrooms.

Pacific Coast Borax Adds Burke

Raymond M. Burke has joined the Pacific Coast Borax Company, a division of Borax Consolidated, Ltd. He will be located at the company's New York office in the technical service and product development department. His previous association was with the research division of General Foods Corporation.

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Agricultural Chemicals

The farmers were still playing a waiting game last week, and fertilizer constituents, in heavy supply at the warehouses, had not yet begun to move out in substantial volume. Trade sources expected a showdown within the next 10 days. They explained that the farmer's position was based on poor profits last year, while producers and mixers were influenced by rising costs. The farmers were reluctant to buy at current price quotations.

No changes in OPD quotations had been reported up to press time, but the latest hike in freight rates was getting serious study among policy makers of some producing companies.

Normal superphosphate demand was still weak, but triple was moving a little better. Potash was slow. High production of ammonia continued to build up in inventories.

Fishmeal and scrap figured in a steady market as the price found its level and was stabilized. Feeding bonemeal moved a little better. Dried blood was steady.

The high and rising price of copper was firming prices in the pesticides market.

Loss of cotton yields on account of plant diseases was reduced to 11.5 percent last year, it was reported by the Cotton Disease Council. The toll in 1954 was put at 14.6 percent.

Price Trends

Advanced
None
Reduced
None
Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 11, 1955
110.89	110.89	110.58	111.42

For Current Prices see Page 9

Animal and Plant Foods

As an increasing number of farmers were shifting emphasis to stock breeding, the Department of Agriculture's Feed and Forage Research and Marketing Advisory Committee put a high priority on research to analyze nutritional constituents of forage crops and to breed superior varieties of forage grasses and legumes. The recommendations, which were to be carried to Secretary Benson, were formulated at a recent annual meeting of the advisory committee in Washington.

Ammonium Nitrate — Production of fertilizer grade material rose from 153,595 short tons in November to 167,675 short tons in the following month, the Census Bureau reported. Stocks increased during December from 200,631 to 209,546 short tons.

Animal Proteins—Dried blood was steady at New York and Chicago.

Demand for feeding bonemeal picked up a little. Other outlets were not as active.

Hoofmeal was tight at the $6.25 price of long standing. There was little material being offered.

The listings for nitrogenous tankage stayed at a range from $4 to $5.10. It was reported that consumers could shop for tankage at a lower figure. The market was weak.

Prices of fishmeal and scrap were steady at $141 and $137, respectively. The market was steady, demand moderate. Supply was fair.

Castor Pomace—There were few sales. Producers had no sales problem, however, as there was very little material available.

Phosphate Rock — Potato planting was getting under way in Louisiana and Maryland, but farmers were still holding out in general. Fertilizer business in the corn and cotton country of the deep south, already weeks late, was still inactive. The result was a sluggish market for rock, in general, and more particularly for normal superphosphate.

Trade sources expected super to begin to move in good volume within another 10 days, since it appeared that it would be necessary for the southern farmers to commit themselves within that time.

Freight economics continued to favor shipment of triple superphosphate, since planting in the west, at points distant from the Florida source of supply, was more nearly normal.

Supply was abundant.

Prices were unchanged, but there was discussion in some quarters as to whether increased freight rates might justify some revision.

Potash—The market continued relatively inactive for this time of year. There was some business in the south, but even there the bulk of trade in fertilizers was kept waiting. It was explained that the farmers' attitude was conditioned by poor profits in the 1955 season, while suppliers were governed by increased costs. Whatever business might develop, it was being put off till the last minute.

Producers were cheered somewhat by a slight shift in the south in favor of a four-twelve-twelve ratio in some areas where the four-ten-seven ratio had been almost universal.

Los Angeles Market

Local buying interest continued moderate with some increase reported over previous weeks. Domestic fishmeals were lower, $2.25 to $2.30 per unit of protein. Canadian herring meal was further reduced. Castor pomace remained nominal at $42.50 per ton with no offerings on the market.

Ruling prices were:—

Ammonium nitrate—$79.67 per ton, f.o.b. Los Angeles. Domestic and Canadian.

Ammonium phosphate—$74.04 per ton in bags, 16/20 grade, f.o.b. Los Angeles, Canadian material. $99.04 per ton, 11/48 grade, in bags, f.o.b. Los Angeles, Canadian material. $104.50 per ton, 11/50 grade, domestic, in bags, f.o.b. Los Angeles. $4 less per ton in bulk.

Ammonium sulfate—$52 per ton in bags, f.o.b. Los Angeles. $49 per ton in bulk. Both Canadian and domestic.

Fish meals—$2.25-$2.30 per unit of protein, domestic, sacks included, f.o.b. San Pedro. Canadian herring meal, $1.90 per unit of protein, f.o.b. Vancouver, $1.75 per unit of protein, f.o.b. Prince Rupert, sacks included, Canadian funds.

Sodium nitrate—$52.75 per ton in 100-pound bags, 15 tons or over, f.o.b. Los Angeles. $47.75 per ton in bulk, same basis. Chilean material.

Superphosphate—$28.50 per ton regular grade, bulk, delivered California points, $30.50 per ton, pelletized, same basis. $4 extra for bags. Ammoniated—$31 per ton in bulk, 3/16 grade, f.o.b. Los Angeles. $4 additional for bags. Triple—$69 per ton in bulk, 47 percent a.p.a., f.o.b. Los Angeles; $73 per ton in bags.

Tankage — wet rendered, fertilizer grades, $3.50-$4 per unit of ammonia, dependent on quality, f.o.b. producing plant.

Pesticides

Plant disease nipped 11.5 percent of the 1955 cotton crop, the Cotton Disease Council reported. The bite wasn't as big as it was in 1954, when the council put the figure at 14.6 percent.

Estimated losses attributable to specific diseases were 363,500 bales to seedling diseases, 322,100 bales to boll rot, 222,600 bales to bacterial blight, 189,200 bales to verticillium wilt, 173,900 bales to fusarium wilt, 164,800 bales to root knot nematodes, 89,800 bales to anthracnose and 12,250 bales to ascochyta blight.

Basic Copper Fungicide—One major producer raised prices 1.6c. per pound across the board on material testing between 53 and 54 percent metallic copper. The revised schedule quoted 35.35c. per pound in carloads and 36.85c. per pound in less carloads in 50-pound bags, freight equalized; 37.35c. per found in carlots and 38.85c. per pound in less carlots in 6-pound bags packed 8 to the case, same basis.

Rising copper prices were squeezing producers of fungicides and pesticides generally, and further increases were predicted if the metal market trend were not soon reversed.

Petroleum Derivatives

Dealers are reportedly beginning to feel the tug of easement occuring in the automotive industry, it was reported last week. Though to-date, due to a variety of reasons, the softening has been slight, dealers fear further decline. One of the reasons for a degree of continued strength has been the presence of the seasonal summer market, one dealer said. However, this market virtually dies in May, and after that the solvents and diluents field will be confronted with the full brunt of the automotive industry problem. The waxes, microcrystalline and paraffin, both showed good sales for last week in spite of the advancement in price. Continued enlargement of the market, coupled with seasonal sales are considered the major causes. Petrolatum, which also was advanced in price (3/8c. per pound across the board) showed good sales figures. Producers advanced the price because of a hike in crude prices in Pennsylvania.

World crude production during June averaged 14,949,000 barrels daily, a minor decline from the rate in May. Total crude petroleum in the Middle East averaged 3,231,000 barrels daily, a decrease of 2.6 percent from May. Iranian production during June rose sharply to 362,000 barrels daily, an increase of 26.1 percent. Daily average production in Iraq reached a record 701,000 barrels. These gains were offset by daily average declines in Saudi Arabia (6.4 percent) and in Kuwait (11 percent). Production in Venezuela during June averaged 2,073,000 barrels daily, a minor change.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 18, 1955
104.53	104.53	104.32	104.42

For Current Prices see Page 9

Solvents and Diluents

Benzol—This market stood relatively easy last week, it was noted by dealers, as inroads caused by a slipping automotive market began to make themselves felt, in spite of the climbing seasonal trend. Producers claimed that the situation would right itself and that seasonal sales would keep benzol in a good position for the next months.

Lacquer Diluent—Automotive industry usage has been on the downgrade, carrying this commodity with it, producers reported last week. Seasonal summer sales have eaten into the void left by the wanning automotive industry demand. However, as one producer noted, the summer sales period will virtually end by May, and at that time, the industry will be confronted with the full force of the automobile decline. Possibly, it was noted, an answer will be found to the problems of the automobile manufacturers by that date.

Rubber Solvents — Good sales were marked by dealers and producers for this commodity last week, it was reported. Producers noted that seasonal strength develops throughout this market at about this time of year and continues until the end of the hot weather sales period, in May. The hot weather factor appears to touch a vast majority of the trade, one dealer noted.

Toluol — This market remained static as demand continued to show ease for toluol, it was reported last week. The slight variable offered by chemical industry uses as a chemical raw material continued to offer some hope to the industry, but as of this date, work in that direction has been slight.

Xylol — Agricultural sales continued to grow last week carrying this commodity into higher demand areas than it had known all year. This, coupled with the new uses developed by the chemical industries, would have brought it up to particularly high production and demand levels, but for the faltering steps being taken by the automobile industry during the past weeks.

Lighter Fractions

LPG's—Sales, in spite of the hot weather during last week, continued on a relatively good level, dealers noted. The sporadic nature of the weather was considered primarily responsible for the continued good market condition.

Waxes

Microcrystalline — This market stood strong in the face of freshly advanced prices, dealers reported last week. Prime impetus to strength appears to be the growing seasonal market. All conditions remaining equal, one dealer noted, the situation should continue to strengthen at least until May, when the seasonal period reaches its final days. These are also the halcyon days for the wax container market.

Paraffin — The seasonal market also continued this commodity at top form last week, producers reported. Demand in all strata, in spite of slightly slipping use in the paraffin-microcrystalline ratio for wax containers, has continued on a high level. Prices were advanced 1/2c. per pound, across the board, last week.

Miscellaneous

Crude Oil—Current reports of the industry for the week ended February 24 indicate an increase in crude oil production and an increase in crude runs. According to the API, the daily average output of crude (including lease condensate) was 7,183,000 barrels, an increase of 67,000 barrels from the preceding week. Daily average crude runs to stills of 8,084,000 barrels were 95,000 above the preceding week, and 411,000 barrels above the week ended February 25, 1955.

Petrolatum—The 3/8c. per pound price advance of two weeks ago have been attributed to an earlier rise in local crude prices, Pennsylvania producers said. Other factors such as growing production costs, are also considered accountable, but the crude advance was primary. The advance was an across the board one and went into effect on the 1st of the month.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended Feb. 25 totaled 255,466,000 barrels according to data reported to the Bureau of Mines. Compared with the total of 256,645,000 barrels for the preceding week this represents a decrease of 1,179,000 barrels comprising a decrease of 1,182,000 barrels in stocks of domestic crude and an increase of 3,000 barrels in stocks of foreign crude.

Los Angeles Petroleum Market

Los Angeles.—Lacquer diluents and light paint thinners showed additional strength during the week with supplies ample. Listings were firm and unchanged at 20.7c. per gallon, 400 gallons or over, ex-tax, f.o.b. Los Angeles. Cleaning solvents, including Stoddard, quoted 19.7c. per gallon, same basis. Demand reported moderate to good with stocks sample.

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Aliphatic Organics

The recent price cut in polyvinyl alcohol was an indication of the growing demand for this compound. Production capacity of the major producer was recently doubled with a new unit which came on stream ahead of schedule. The potential for polyvinyl alcohol was reported to be substantial in view of the increase in synthetic resins output. While there were no price changes reported in the aliphatic organics market last week, the possibility of price hikes to be announced by March 15 became more emphatic with the announcement of freight rate increases by both the trucking and railroad industries, effective March 7.

The increase did not come as a surprise, however, in view of the fact that the proposal had been under consideration for some time. It appeared very likely that chemicals and solvents producers would be forced to reflect the increase, which amounted to 6 percent, across-the-board, for the railroads and 7 percent, for the truckers. A survey of chemical producers revealed a general opinion that price quotations would be increased to offset the rise in shipping costs. Late in the week a major producer of carbon bisulfide announced a price adjustment to the following basis. The tankcar price is scheduled to be hiked 20 cents per hundred pounds, effective April 1, 1956 with full freight allowed to consuming plant. Other producers were expected to follow suit.

The volume of business in solvents continued at a brisk rate, according to most producers. The outlook for the second quarter was optimistic in view of the fact that auto production is expected to be speeded up again following the recent period of slow-down during which inventories have been trimmed.

Expansion and construction of synthetic methanol facilities has been scheduled by two current producers of the alcohol. Proposed construction by one maker is slated to increase his overall capacity by 7,000,000 gallons. Consumption of methanol has been steadily rising particularly as a fuel additive compound. The government's missile and rocket development program has been accounting for a significant proportion of output in addition to its major use as a raw material in the manufacture of formaldehyde.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 11, 1955
130.98	130.98	131.02	130.41

For Current Prices see Page 9

Acetic Anhyride — Production of acetic anhydride totaled 80,027,179 pounds in December, 1955, compared to 73,490,753 pounds during November last year, the Tariff Commission reported.

The market continues unchanged. Production is sustained at a steady pace while supplies were adequate to meet consumer needs.

Acetone—The market in acetone remains quite firm. Consumption has been running at very good levels in most industries and earlier fears expressed last year that there would be an oversupply of acetone appears to have been unjustified. Supplies were about in balance with overall demand and prices have been maintained at a steady level.

Production of acetone in December totaled 45,763,841 pounds compared to 47,369,215 pounds in November, according to a recent report of the Tariff Commission.

Alcohol—Demand for ethyl alcohol continues unabated, for the most. There has been little if any let-down in the volume of orders traceable to the cutback in auto production, according to trade sources. In a number of instances it was probably too soon to tell the extent of any such decline due to the multiplicity and diverse end uses of ethanol in the automotive field. The overall pattern of demand appeared to remain unchanged with producers reporting a brisk call. Supplies were adequate to cover consumer requirements while prices were firm.

A development which may or may not be reflected in higher alcohol prices in the future was the increase in freight rates last week which was put into effective on both railroad and truck delivered materials. The railroads boosted their schedules 6 percent across-the-board while the truckers advanced their fees 7 percent on a similar basis. It has been estimated that almost half of the delivered cost of alcohol is freight and handling charges. That this latest move will increase producers costs is certain but whether it will be reflected in higher costs to the consumer was a matter for conjecture at this time.

A new, anhydrous alcohol plant was put on stream quite recently which was claimed to be the largest anhydrous unit ever built. The demand for anhydrous alcohol has increased significantly in recent years, and the outlook for the future was regarded as optimistic, it was noted.

Carbon Disulfide — Demand for carbon disulfide was reported to be running at a brisk rate. Supplies were adequate to accommodate trade requirements and expected to continue in the immediate future. Prices held at a steady level and no change was anticipated in view of the price adjustment made earlier in the year.

Production of carbon disulfide aggregated 52,534,745 pounds in December, according to the Tariff Commission, compared to 49,123,317 pounds in November.

Carbon Tetrachloride—The spot market was unchanged last week. Overall demand volume was running at a steady pace on the whole, it was said. The cutback in auto production has not had any notable effect upon demand, according to producers. Supplies were adequate to meet trade requirements and expected to continue in the immediate future. Pricewise, the situation was firm.

Production in December amounted to 25,249,803 pounds, according to the Tariff Commission, compared to 21,736,163 pounds produced in November.

Ethanolamines—The market held at a steady pace, on the whole. Volume was reported to be sustained at a good rate, while prices were unchanged. Supplies were abundant and expected to continue adequate in view of the ample production capacity in this country.

Production of ethanolamines mono-, di- and tri-) totaled 6,919,110 pounds in December compared to 7,168,631 pounds in November, according to the Tariff Commission.

Ethylene Glycol — Demand for ethylene glycol continues at a brisk rate, according to producers who are currently manufacturing antifreeze for the approaching winter. Despite the cutback in automotive production which has been in effect since the beginning of the year, replacement antifreeze and new car business were expected to combine to push overall ethylene glycol consumption in antifreeze to a new high this year, some observers contend. Other end uses for the glycol were also expanding and there were indications that the plastics and coatings industries might step up their share of the overall consumption pattern.

Supplywise, the formerly tight situation earlier in the year has eased somewhat and the recent announce-

ment of projected increases in production capacity were expected to supply enough glycol to make up any reasonable expansion in usage. Price quotations remain steady and firm in the face of a sustained demand.

Production of ethylene glycol totaled 82,575,286 pounds in December compared to 75,534,759 pounds in November last year, the Tariff Commission reported.

Glycerine — Production of refined glycerine continued at high levels last week. With spring "just around the corner," makers of protective coatings have been operating at seasonally high levels with a resultant substantial demand for glycerine for use in these products. The supply picture is good with trade observers noting that stocks were at their highest point since mid-1954. Total glycerine production for the year past reached an aggregate of 228,000,000 pounds, a record figure.

Imports of crude glycerine continue at a significant rate with the spot market maintaining a somewhat easier tone since prices dropped off last month. The outlook for, glycerine consumers in the months to come was bright as reckoned by the buildup in stocks and record production. Thus, an abundancy of glycerine appears assured during 1956. Producers were confident of continued heavy consumer call as is reflected in the announcement of current plant expansion.

Exports of glycerin in December last year amounted to 466,000 pounds compared to 400,000 pounds in November. The January-December cumulative total of exports aggregated 9,680,000 pounds compared to some 16,860,000 pounds in the corresponding period last year.

Stocks of glycerin at the end of December totaled 51,977,000 pounds compared to 47,904,000 pounds at the end of November and 42,350,000 pounds on hand at the end of December, 1954. Disappearance of glycerin in December last year totaled 18,878,000 pounds compared to 21,559,000 pounds in November and 19,659,000 pounds in December, 1954. Overall disappearance last year amounted to a total of 235,660,000 pounds compared to 222,294,000 pounds in 1954.

Methanol—Demand for methanol continued to run at full tilt. Non-antifreeze outlets for methanol have been steadily increasing and the amount of methanol used in the guided missles and rocket research and development programs has been stepped in line with the overall increase in emphasis upon that phase of the national defense program.

Announcement was made by two major methanol producers of plans to increase current production capacities. A new facility with a capacity of 7,000,000 gallons a year is slated for construction by one producer. The plant's cost is expected to exceed $2,000,000, it was said, and will have a daily output of 70 tons of methanol. Of this, approximately one-third is scheduled to be for sale with the balance being consumed in captive facilities which will produce pentaerythritol and formaldehyde. Construction of the methanol plant is scheduled to commence late this spring with completion anticipated for the second quarter of 1957. No figures as to the expected output of the second producers' plant expansion were given, although an aggregate of $10,000,000 is slated to be spent in overall expansion of present methanol and petrochemical derivatives facilities combined.

Pricewise, methanol remained very firm with no change anticipated in the immediate future. Production of synthetic methanol amounted to 130,643,273 pounds in December last year, according to the Tariff Commission. This compared with the 114,244,645 pounds turned out in November.

Polyvinyl Alcohol — Price quotations on several grades of polyvinyl alcohol were recently reduced 6½ percent by a major producer. A new unit that will double former production capacity was recently brought on stream ahead of schedule and the price cut was said to reflect improved efficiency and an expanding market. Demand for synthetic resin has increased substantially thus providing a substantial hike in the demand for polyvinyl alcohol.

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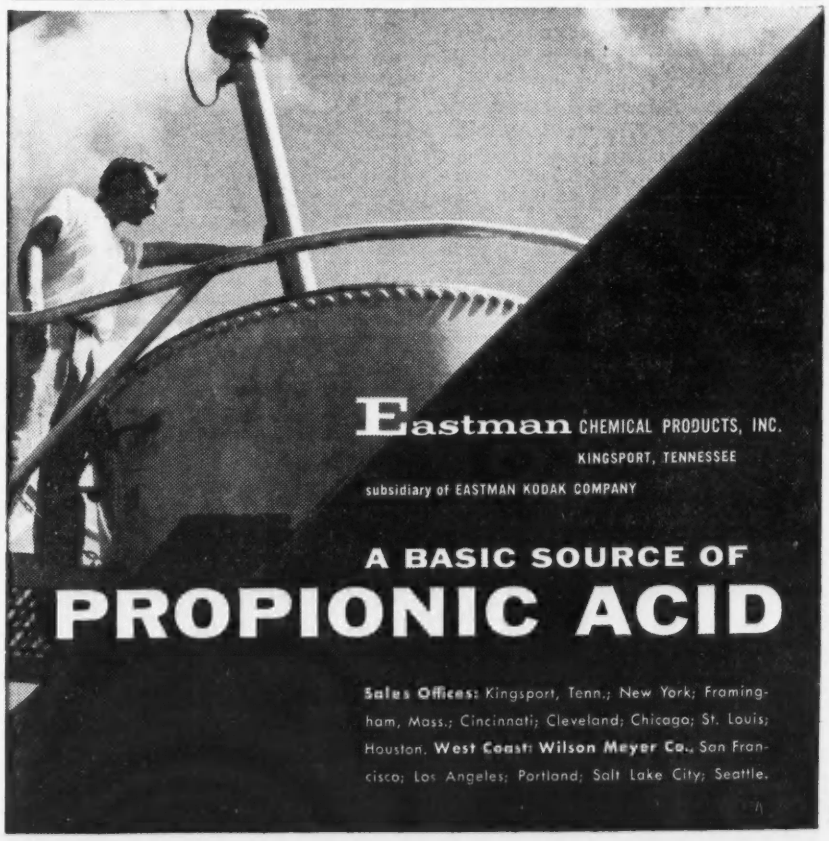
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Obituaries

Dr. Harold M. Barnett

Dr. Harold M. Barnett, owner-manager of Barnett Laboratories, Inc., Long Beach, Calif., died February 20 in that city. He was fifty-two years old.

Dr. Barnett was a pioneer in carotene research and production. After several years as a research chemist, he founded Barnett Laboratories in Long Beach in 1936.

W. A. Borror

W. A. Borror, in charge of acid sales at Diamond Alkali Company, Cleveland, Ohio, died March 4. He was fifty-six years old. Mr. Borror had held his position at Diamond since 1953, when Diamond bought Belle Alkali Company, for whom he had been vice-president in charge of sales.

G. A. N. King

George Alexander Newton King, secretary, board member, and one of the founders of McLaughlin Gormley King Company, Minneapolis, Minn., died March 5 in that city. He was eighty-six years old. Mr. King was engaged in company activities for more than fifty years.

Carroll Dunham Smith, sr.

Carroll Dunham Smith, sr., president of Carroll Dunham Smith Pharmacal Company, New Brunswick, N. J., died March 2 in West Orange, N. J. He was eighty-three years old.

Mr. Smith had been associated with his father in the manufacture of pharmaceuticals, a venture started by his grandfather in 1844. The company was one of the oldest drug houses in the United States.

Malcolm W. Armstrong, former vice-president of United Dye & Chemical Corporation, and president of Pure Drug & Chemical Corporation, died March 2 in Williston Park, N. Y. He was fifty-three years old.

Paul Barnett, chief of public relations for Bahrein Petroleum Company, died March 2 in Awali, Bahrein. He was forty years old.

John J. Conry, retired president of Carter Oil Company, Tulsa, Okla., a subsidiary of Standard Oil Company (New Jersey), died March 3 in that city. He was seventy-seven years old.

Dr. Paul J. Kolachov, international expert on fermentation and distillation, died February 29 in Bogota, Colombia. He was fifty-six years old.

Russell B. Paul, for many years a mining engineer with New Jersey Zinc Company, New York, died March 5 in La Jolla, Calif. He was seventy-seven years old.

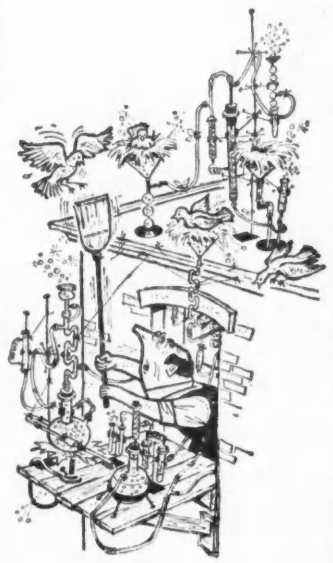
Chester H. Pope, president of Pope & Gray, Inc., Clifton, N. J., died March 5 in Summit, N. J. He was seventy years old.

Morris W. Siegel, a chemist for Cities Service Oil Company at Linden, N. J., died March 2 in Elizabeth, N. J. He was sixty-two years old.

Colgate Soap Sales Department Announces Two New Promotions

Two promotions have been announced by the soap sales department of Colgate-Palmolive Company. Walton E. Hayman has been appointed manager of national chain store sales in the home office soap sales department, and Hugo A. Galligan has been advanced to the position of New York divisional manager.

For the past fifteen years, Mr. Hayman has been New York district manager and Mr. Galligan has served as Philadelphia district manager of the soap sales department. Mr. Hayman joined Colgate in 1921 and Mr. Galligan in 1917.



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Textile, Leather Chemicals

Withdrawals of most textile and leather chemicals, continued in active demand last week, while new business was restricted to actual needs. Market tone continued firm and prevailing prices were maintained for spot and later delivery. Chemicals moved in good volume against orders. Potato starch and other sizing materials also were in steady request, against former orders but consumer interest was confined to fill-in needs. Tapioca flour was steady for shipment from Brazil and offers from Siam were reported more liberal. Sago flour on spot was in better supply and adequate to meet current demand.

Tanners continued to limit purchases of foreign tanning materials to nearby shipment. Volume business transacted was reported as fair. Primary markets were steady and quotably unchanged.

Fiber consumption on woolen and worsted systems in January was indicated at 17 percent above December and 16 percent more than in January last year. Weekly average raw wool consumption in January totaled 9,309,000 pounds (scoured basis) some 17 percent above December and 18 percent above January 1955. Consumption of carpet class wool was 16 percent larger than December and 26 percent above January last year, while apparel class wool was 17 percent above December and 14 percent in January 1955, Consumption of fibers other than raw wool averaged 5,742,000 pounds per week, 17 percent more than December average and 12 percent above January 1955.

Shoe production in January totaled 53,139,000 pairs of shoes, according to the Census Bureau, 13.3 percent more than January last year. The big gains were in men's work shoes, women's play shoes, misses' shoes and house slippers. The average factory value per pair in January 1956 shipments was $3.63 or 6c. per pair more than January 1955.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Mar. 11, 1955
107.85	107.85	106.60	102.14

For Current Prices see Page 9

Chemicals

Bichromates — Consumers continued to absorb sizable quantities against current contracts. Market was unchanged and steady. Spot demand was confined to actual needs.

Export of chrome ore from India will be regulated on a quota basis in 1956, the Ministry of Commerce and Industry has announced. Shippers who exported this ore during any one of the three calendar years 1953, 1954, or 1955 will upon application be granted individual quotas based on the most advantageous of the 3 years. In the first 10 months of 1955, India is reported to have shipped 42,397 long tons of chrome ore to all destinations.

Sodium Hydrosulfite — Demand was moderate chiefly for actual needs. Delivery against former orders continued active. Prices were firm and unchanged.

Sulfonated Oils — Business was moderate, chiefly for prompt needs. Prices were unchanged and steady.

Sizing Materials

Albumin Blood—Buying interest was restricted to actual needs. Seasonal improvement was expected within the next month. Stocks were adequate and were maintained at 65c. to 80c per pound, as to quantity.

Corn Dextrin—Good demand continued for prompt delivery. Prices remained steady. Gum was quoted at $9.15 per 100 pounds, paper bags, carlots, New York delivery; canary, $8.89; dark, $8.99 and white, $8.73, same basis. Smaller quantities were 15c. per 100 pounds higher.

Corn Starch—Firm tone prevailed in this market. Quotations were strong. Demand was active. Pearl was quoted at $7.13 per 100 pounds, paper bags, carlots, New York, and powder $7.25, same basis. Lesser quantities were 15c. per 100 pounds. Visible corn supply increased 962,000 bushels to 52,083,000 bushels for the week ended March 2, compared with 47,691,000 bushels for the same time last year, according to the Chicago Board of Trade.

Egg Albumin—Trading was spotty. Flake was quoted at $2.20 to $2.24 per pound, and powder, $2.24 to $2.28 per pound, spot according to seller and quantity. Technical ranged from 83c. to 90c. per pound, as to quantity.

Liquid egg production during January was relatively small, the Crop Reporting Board announced, and totaled 8,241,000 pounds, compared with 30,715,000 pounds in January last year and the 1950-54 average of 27,590,000 pounds. Dried egg (egg solids) production amounted to 660,000 pounds compared with 1,919,000 pounds in January last year and the average of 1,664,000 pounds. The January production consisted of 9,000 pounds of dried whole egg, 437,000 pounds of dried albumen, and 214,000 pounds of dried yolk. Production during January last year consisted of 94,000 pounds of dried whole egg, 900,000 pounds of dried albumen and 925,000 pounds of dried yolk.

Potato Starch—Firm tone prevailed despite light new business. Withdrawals against contracts continued in active request. Prices were maintained at 5¾c. per pound, carlots, f.o.b. Maine and 6c., Idaho, with 6/10c., less for delivery to eastern points. Stocks on spot were unchanged at 8c. to 8¾c. per pound, exwarehouse as to quantity.

Tapioca Flour—Prices were unchanged and steady. Shipments from Brazil were held at 6.1c. per pound, carlots, exdock. Spot stocks were unchanged at 7¾c. to 8¼c. per pound, exwarehouse, as to quantity. Offers from Siam were freer and medium was available at 5¾c., carlots, exdock, prompt shipment.

Tanning Materials

Cutch—Buying interest was fairly active. Shipments were maintained at 8½c. per pound, carlots, exdock, exdock.

Mangrove Bark—Trading was reported slow. Primary markets were unchanged and steady. African bark was quoted at $70 to $71 per ton, exdock; Colombian, $58 and Ecuadorian, $55 per ton, same basis for prompt shipment.

Myrobalans — This market remained firm, reflecting light offers for shipment. No. 1, assorted was more or less nominal at $68 per ton, exdock; crushed, $80 and Bombay, $63, same basis.

Quebracho Extract—Trading continued spotty, chiefly for nearby shipment. Solid ordinary, guaranteed 63 percent tannin quoted at 11 21/32c. per pound, exdock, plus duty and clarified, 64 percent at 12 23/64c., same basis.

Wattle—Consumers continued to operate in hand-to-mouth manner, chiefly for prompt shipment. Shipments were quotably unchanged and well held. Fair average bark was quoted at $98 per ton, carlots, exdock and merchantable, $94 per ton, same basis. East African extract was firm at 9⅞c. per pound and South African, 10c., carlots, exdock, plus duty.

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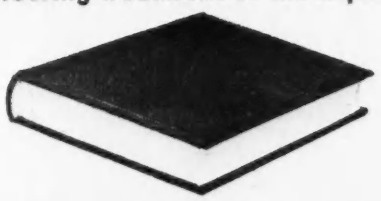

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Coal Chemicals

Benzol and cresylic acids paced a strong market. Steel production continued to meet quotas exceeding the industry's capacity of only a few months ago, one result being greater benzol production than ever before and the discovery of the substantial reservoir of strength in this market. Cresylic acids were generally tight, and imports were increasingly less available. With some capacity held in reserve, phenol output was moved without delay.

The status of toluol was unchanged. Production was maintained at a very high level, and some of it continued to accrue to inventory.

Domestic naphthalene crudes were still tight, but the phthalic anhydride market was evidently coming into balance. And naphthalene importers were not finding much of a market here for the more highly priced foreign product.

Di-tert-butyl-p-cresol and divinylbenzene continued to move into wider and bigger markets.

Producers who several months ago hiked their price on b-oxynaphthoic acid have returned to the old level of $1.14 per pound. A minor segment of the industry had continued to sell at the lower figure throughout the period of price adjustment.

The cutbacks in the automotive industry had brought on serious dislocations nowhere. Mild effects were observed in some chemicals, none at all in others.

Commanding more earnest study was the boost in freight rates. Policy makers were considering the feasibility of less lenient shipping terms and even increased prices as applicable in the case of low-price products sold in bulk. Discussions of this nature were still highly tentative, and it was said that, in any case, the keen competitive climate of today would moderate any move to share the revenue loss with the buyer.

The American Iron and Steel Institute estimated steel production in the week ended March 11 would amount to 98.4 percent of theoretical capacity, equivalent to 22,422,000 tons of steel. This was compared to production of 2,459,000 tons in the week previous, 2,439,000 tons in the comparable week in February and 2,241,000 tons of steel produced in the corresponding week in 1955.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 11, 1955
114.89	114.89	114.89	114.63

For Current Prices see Page 9

Basic Products

Benzol — The market continued very strong. Synthetic phenol and styrene monomer, the automotive cutbacks notwithstanding, continued to draw off the heavy benzol production as fast as it was offered. Diversification of the channels of demand was bringing added strength to the market wherever it might be needed. Prices remained without change.

Creosote—Steel production, consistently hitting a mark of about 99 percent of capacity, was pouring creosote oil on the market faster than it could be digested. Already heavy stocks were growing.

The crux of the problem has been deferment on the part of the railroads of routine replacement work on the roadbeds. The backlog in this work will have to be made up within another year or so, perhaps much sooner, and producers could count on heavy demand when the railroads move.

There would be a delay of several months, however, between the time the railroads contract for the work and the time when the creosote would be ordered. Lumber for ties would have to be cut and seasoned for several months before it could be creosoted. At last reports, it appeared there would be an earlier delay, this to allow time to round up labor for cutting the white stock.

Cresols—Demand was concentrated increasingly on the meta-para fractions, which were tight generally. Continued heavy inquiry for tricresyl phosphate and growing demand in Europe and South America were pinching available supplies.

Production was on the heavy side, but there was virtually no material on hand for inventory accumulation.

Prices, again unchanged last week, had shown no tendency to move since the new schedules were posted at the first of the year.

Cresylic Acid—The meta and para fractions had tightened up generally. Strong demand for tricresyl phosphate was a firming influence. Resins also continued to exert strong pressure. The recent price increases had no visible effect on demand.

European demand had sharply reduced the availability of imported acids, and a vigorous market had appeared in South America. It was reported that very little British ADF was being offered here at the 85c. price, if any, and that some British producers were asking 90c. to 95c. It was not learned, however, whether any sales had actually been consummated at the higher figures.

Ortho was moved to order, but shipments of other fractions were somewhat delayed.

Naphthalene—The picture was a bit cloudy here. Production was just about equal to capacity, and all domestic output was moved immediately. A tight situation was general with respect to crude naphthalene, about 80 percent of which was being consumed in production of phthalic anhydride. Yet, phthalic was being produced fast enough to satisfy demand.

Importers noted that demand was not as strong as it had been a year ago. They surmised that US production might have reached a level where it could pretty well satisfy US demand. Other factors tending to limit imports were the high import prices and growing strength of demand in Europe. In spite of these arguments, substantial tonnages were being brought in.

Domestic prices, unchanged, were on a strong footing.

Phenol—Strong demand was sustained. Production was keyed to harmonize with the market. Synthetic output was moved without delay in trade that was reported to be as lively as at any time in the past six months. Natural phenol was a bit tight. Prices were on solid ground at the level established last October.

Quinoline — Activity in nicotinic acid was toning up this trade, which had been on the slow side. Supplies were still abundant, however, and producers could accommodate sub-

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending March 11 was as follows:—

Ammonia liquor	lbs.	941,389
Ammonium sulfate	lbs.	40,084,930
Benzol	gals.	3,583,350
Coaltar	gals.	17,613,075
Creosote oil	gals.	683,266
Naphthalene, crude	lbs.	3,811,105
Pyridine, refined	lbs.	13,665
Toluol	gals.	789,552
Xylol	gals.	227,755

stantially increased demand. The price was unchanged.

Toluol—No one had sighted a silver lining for this market. Overall output continued to meet all the demand that could be generated and to flow over into inventories. The volume of sales was large, but not large enough. The open market price was maintained rigidly at the level now prevailing for more than a year, and producers were not at this time talking about any reductions.

Xylol—Demand had outrun supply in most areas, and xylol continued tight. Production was maintained at a high level. Prices, long unchanged, were on firm ground.

Intermediates

Acetanilide — This market continued weak. Imports were still doing substantial damage to the domestic trade. Supply was abundant. Prices, long unchanged, were held in place by cost factors, on the one hand, and the foreign competition, on the other.

Chlorobenzoic Acid—Classified as a development product, this compound had been moving fitfully and in small volume to a broad spectrum market. Volume of trade evidently had not been at all affected by the price increases of last summer. Some times the para fraction had moved better. At other times, the ortho had been more active. Recently, and unaccountably, the para fraction had been much stronger.

Works prices stood at $1.10 per pound in truck lots and $1.25 per pound in smaller quantities for the ortho, $2.25 per pound for 2,000 pounds or more of the para, $2.30 per pound of para for less than 2,000 pounds.

Di-tert-Butyl-p-cresol—Demand so far this year has continued to increase at about the same rate it increased over the two years previous, during which time sales were hiked about 20 percent. This product was generally in adequate supply, though producers had to do some shopping to get the raw materials. Prices were steady and unchanged.

Diphenyl—There were some sales for plasticizer use at prices now of long standing, 15c. per pound in barrels on carlot orders at the works, 16c. per pound in barrels on smaller orders. Still in effect was a 1½c. per pound saving on orders packaged in bags.

Divinylbenzene—This market continued to expand at the good pace exhibited over the last two years. Production was geared to demand, and supply was adequate. The price was unchanged.

b-Oxynaphthoic Acid—Most producers who had hiked their price several months ago to $1.17 per pound have cut it back in the past week or two to the former quotation of $1.14. Nearly all the industry had gone along with the increase, but a small part of the output was sold throughout this transition period at the lower figure.

At least one firm, whose schedule was not changed during this period, continued to offer the acid at $1.14 per pound to pigment manufacturers and at $1.17 to other consumers. As far as could be determined, no major producer was still quoting a flat rate of $1.17 per pound at the end of last week.

Typical shipping terms were f.o.b. plant with minimum transportation allowed on orders of 225 (or, in some cases, 250) pounds or more.

The market was not strong. The once thriving trade in black dyes for acetate yarns had been almost stilled by changes in the textile industry. Most textile producers were dyeing their own yarns, and the trade in grey goods was poor. Another factor apparently was imports of b-naphthol.

Phthalic Anhydride—Demand was no longer accelerating as it was six months ago. It was still strong, however. Producers said sales to date this month were about equal to the average of sales recorded in February. In some cases, a small inventory, usually about three to four days' supply, was on hand at the end of February. The supply generally was adequate. Evidently, producers were succeeding in getting enough raw materials in spite of the tight market in naphthalene. Phthalic prices were steady at the current quotations.

Resorcinol—Growth in the demand for resorcinol continued to show promise. Current production was being taken up rapidly, and producers were watching closely the development of new market potential. Prices of long standing remained unchanged.

Salicylic Acid — Vigorous trade was continued in substantial volume. Trade sources reported there had been no slack in the strong demand in recent months. Prices were steady at the previously quoted levels. Supply was generally adequate.

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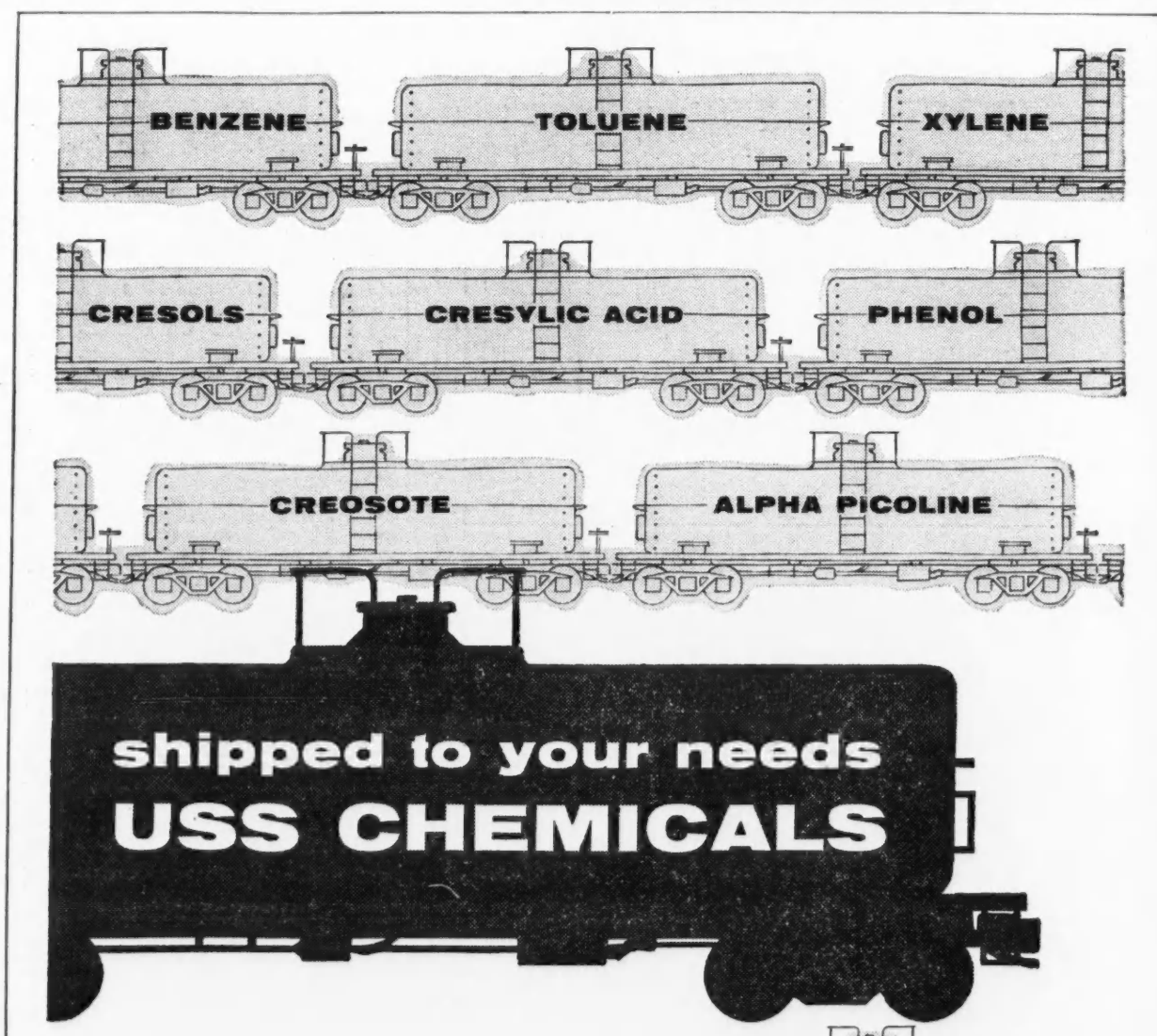

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Stein-Davies Elects Two To Vice-Presidents' Posts

S. Crawford Bonow and Frank G. Fackler are new vice-presidents of Stein-Davies Company, Long Island City, N. Y., manufacturing subsidiary of Stein, Hall & Co., Inc.

Mr. Bonow joined Stein-Davies in 1946 as assistant to the vice-president in charge of production. He was appointed plant manager in 1946 and was elected an assistant vice-president in 1952. He was made manager of manufacturing for Stein, Hall in 1954 and continues to retain that post.

Frank Fackler has been manager of the Stein-Davies plant since 1952. He began his career with the company in 1939, holding various positions in the plant before becoming manager of the stock storage and handling department in 1946. In 1948 he was appointed assistant plant manager and two years later took his present post as manager. He was elected an assistant vice-president of Stein-Davies in 1953.

Chicago Cosmetic Chemists Hear Guenther March 13

The Chicago chapter of the Society of Cosmetic Chemists will hold its next meeting March 13 at Henrici's Restaurant in the Merchandise Mart.

Dr. Ernest Guenther, vice-president and technical director of Fritzsche Brothers, Inc., New York, will be the guest speaker. His talk, "The Volatile Oils," will be supplemented with color films which Dr. Guenther himself took in Europe and in Africa within the last two years.

Dr. Guenther will also lecture and show his films to the Chicago section of the Institute of Food Technologist on March 12.

Atomic Energy Rules

—*Continued from page 5*

other relationship" with the commission. He said the government now has the following four types of arrangements with private industry:—

1. Research and development contracts for government-owned and government-financed facilities.

2. Research and development contracts financed by the government but utilizing privately-owned facilities.

3. Supply contracts for the purchase of materials, which contracts involve no research or engineering effort.

4. Access permits to private contractors making available to the latter certain technical information in possession of the commission.

"In each of the first three types of relationships, the commission uniformly reserves the right to acquire ownership in the invention and patents of the contractor in the atomic energy field except for such rights as it may voluntarily return to him," he said. "Usually, anything returned to the contractor does not relate to the atomic field as such. As a result, the United States is not developing a patent situation in the atomic field either in the US or abroad commensurate with its inventive contributions.

"For example, under development contracts of types 1 or 2, many invention disclosures of potential value may be sent to the commission by the contractor. Frequently, these disclosures may relate to ideas which are not to be embodied in the product under construction. As the commission is in no position to patent or develop all of the ideas submitted to it, the commission neither applies for a patent nor assigns funds for the development of the idea.

On the other hand, the contractor is not justified in applying for a patent because, if he obtains a patent of value, the commission may take ownership under the terms of his contract. This also means that the contractor is discouraged from spending his own money for the development of that particular invention as he has no idea what his ultimate patent protection will be, if any. Consequently, nothing happens to many of these ideas and the US public receives no benefit whatsoever," Mr. Steiger pointed out.

FDA's Inspector

—*Continued from page 5*

sible for $165,000,000,000 worth of interstate commerce each year.

"For this task, we have only 250 inspectors.

"This means each establishment can be visited only once in nine years."

The remaining 750 people on the FDA staff, Dr. Larrick said, are mainly research workers, laboratory technicians and clerical help.

"For all practical purposes, fraudulent drugs and impure foods are nonexistent today," Mr. Larrick added. "But as the food, drug and cosmetic industries expand, the work of the FDA grows."

Robert L. Swain, editor of *Drug Topics* and chairman of the board of trustees of the US Pharmacopeia, stressed that the citizens advisory committee representing both the public and industry has complained vigorously about FDA's shortage of manpower funds.

Another speaker on the program, H. Thomas Austern, counsel for the National Canners Association said:—"The congress and the public have come to accept FDA inspection as a routine matter and this complacency is one of the reasons that the FDA has been hampered by inadequate appropriations."

Dr. Austin Smith, editor and managing publisher of the *Journal* of the American Medical Association, said the food and drug laws had been of tremendous value to practicing physicians, through careful evaluation and the standardization of drug products.

Dr. Ernest H. Volwiler, president and general manager of Abbott Laboratories, welcomed the guests "as members of a triumvirate who are the beneficiaries and supporters of a body of law that has public welfare as its purpose."

"The Food and Drug Laws' requirements for establishing the safety of drugs has stipulated research," he said. "And the more intensive investigations have helped unearth new and much more potent medicinal products."

Polyethylene Unit

—*Continued from page 3*

marketed under the Koppers trade-name of "Super Dylan" polyethylene. Mr. Walker pointed out that "Koppers was the first major chemical company to be granted licenses under the Ziegler process. It also was the first chemical company to introduce the new material in the United States. Koppers is the only company presently offering semi-commercial quantities of low-pressure polyethylene to the industry. Semi-commercial quantities of the material have been in production for the past six months at Koppers' Kobuta, Pa., plant."

The Koppers engineering and construction division will design, engineer and construct the new plant. Ten buildings will make up the new chemical plant. They will include various operating units, a laboratory, maintenance and utility facilities, warehouses and office buildings.

HIF Is Studying

—*Continued from page 4*

medical care and maintenance of self-respect. The data will not duplicate existing official records.

"Much available material concerning the aged is rehashed data from the United States Census," Mr. Anderson said, "or data based on rehashed or cursory studies. We hope to gather new data significant to a thorough understanding of the problems of older people."

Dr. Anderson pointed out that many states have established commissions on aging, and that several universities have conducted symposiums on problems of the aged. Also, Department of Health, Education, and Welfare has established a commission on aging.

The Foundation study, he said, will be designed to assist all interested groups by providing reference points and to serve as a model for further studies on a state and local basis.

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Ammonium hydroxide, 6,643 gals., 27%, inv. 152, Mar. 15, Contracting Officer, Patrick AFB, Fla.

Amyl alcohol, 96 ¼-lb. bots. ACS, East & West Coast, inv. A1357-A, Mar. 14, Vets. Adm. Chief, Proc. Div., Supply Service, Vets. Adm. Bldg., Washington 25, D. C.

Butyl alcohol, 768 ¼-lb. bots., normal, USP reagent grade, East & West Coast, inv. A-357-A, Mar. 14, Vets. Adm. Chief, Proc. Div., Supply Service, Vets. Adm. Bldg., Washington 25, D. C.

Dextrin, 14,520 pkgs., injection, 6%, 500 cc, overseas pack, inv. 536, Mar. 30, Armed Services Med. Procurement Agency, 84 Sands St., Bklyn. 1, N. Y.

Fertilizer, 44 tons, inv. 77, Mar. 20, Contracting Officer, Andrews AFB, Washington, D. C.

Insecticides, 3,000 lbs. DDT powder, 330 gals. orthodichlorobenzene, 110 gals., lindane, 125 lbs. chlordane, inv. 60, Mar. 22, Contracting Office, Tyndall AFB, Fla.

Lead stearate, 50,000 lbs., inv. 174-82, Mar. 16, Supply Officer, Naval Powder Factory, Navy Dept., Indian Head, Md.

Paint, 842 gals. semigloss, interior enamel, inv. 151-16101, Mar. 19, Supply Dept., Bldg. #83, Navy Dept., Phila. Naval Shipyard, Phila. 12, Pa.; 7,200 lbs. lithograph varnish, #5 pale, submit 1 qt. sample, inv. 3-5-P, Mar. 15, Treasury Dept., Bureau of Engraving & Printing, 14th & C Sts., S.W., Washington, D. C.; 700 gals. bituminous paint, coaltar pitch base, blended type, East & West Coast, inv. 383-1156, Mar. 15, 1,600 gals. caulking compound, for steel beams, gun and knife applications, East Coast, inv. 1181, Mar. 20, 2,685 gals. quick drying lusterless enamel for ammunition, 1,600 gals. quick drying, interior gloss enamel, 2,207 gals. ready mixed, flat, stencil paint, inv. 1163, Mar. 26, 787 gals. semigloss syn. enamel, Fort Polk, inv. 1223, Mar. 20, 39,840 gals. aircraft and syn. enamel, inv. 987-B, Mar. 20, Aviation Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Phosphorus, 180,000 lbs., white, inv. CML-42, Mar. 19, N. Y. Chem. Procurement Dist., 180 Varick St., N. Y., N. Y.

Soda ash, 100,000 lbs., 58% ash, Franconia, Va., inv. RIW-73923-R, Mar. 16, Gen. Services Adm., Region 3, Business Service Center, 7th & D Sts., S.W., Washington 25, D. C.

Sodium cyanide, 3,500 lbs., tech., Pensacola, Fla., inv. 155-(1)-1064, Mar. 21, 4,000 lbs. same, East Coast, inv. 155-(1)-1101, Mar. 21, Gen. Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Sodium metasilicate, 280 100-lb. containers, Franconia, Va., inv. RIW-73997-R, Mar. 22, Gen. Services Adm., Region 3, Business Service Center, 7th & D Sts., S.W., Washington 25, D. C.

Stearyl Alcohol, 240 500-gm. bots., USP, East & West Coast, inv. A-357-A, Mar. 14, Vets. Adm., Chief, Proc. Div., Supply Service, Vets. Adm. Bldg., Washington 25, D. C.

Sulfuric Acid, 34,970 gals. electrotype, inv. 96, Mar. 15, Contracting Officer, Benicia Arsenal, Benicia, Calif.

Research Corp. Picks Yates

S. Blake Yates has been appointed director of the patent development division of Research Corporation, New York. Prior to joining Research Corporation in 1948, Mr. Yates was employed by Lederle Laboratories Division of American Cyanamid Company, at Pearl River, N. Y.

Current Prices

—Continued from page 29

Zinc phenosulfonate, NF, gran., dms	lb.	.39	—
powd., dms	lb.	.42	.49
Resinate, precip., 7.2-7.6% Zn, dms., frt alld	lb.	.29	—
Silicofluoride, dms., works	lb.	.12½	.14
Stearate, tech., USP, ctns., c.l.	lb.	.39	—
l.c.l.	lb.	.39	—
	lb.	.40	.44
Sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd E	100 lbs.	8.75	—
l.c.l., dlvd E	100 lbs.	9.75	—
Zinc sulfate in bbls. 40c. higher.			
USP, gran dms	lb.	.26	—
Sulfide, pure, bgs., c.l., dlvd	lb.	.2530	—
Undecylenate, dms.	lb.	2.25	2.50
Yellow (see Yellow, zinc).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	9.65	—
bbls., c.l., works	100 lbs.	10.25	—
l.c.l., works	100 lbs.	10.75	—
Zinc-formaldehyde sulfoxylate, basic, dms., c.l.	lb.	.25½	—
l.c.l.	lb.	.26	.41½
normal dms., l.c.l., works	lb.	.52	—
Zircon (G), gran., bgs., c.l., works,	lb.	.03½	—
5 tons to c.l., works	lb.	.03⅝	—
1 ton to 9,999-lb lots, works,	lb.	.04	—
smaller lots, works	lb.	.06½	—
milled, bgs., c.l., works	lb.	.04½	—
5 tons to c.l., works	lb.	.04⅝	—
1 ton to 9,999-lb lots, works,	lb.	.04¾	—
500-1,999-lb. lots, works	lb.	.07½	—
Zircon (G) in barrels, 1c. higher.			
Zirconium acetate, 13% com., ZrO_2, c.l., 30,000 lbs. minimum, works	lb.	.23	—
Hydride cns., works	lb.	7.00	8.45
Nitrate dms., ex whse	lb.	4.50	7.00
Oxide, 92½-99%, white, grd., bbls. or bgs., works	lb.	1.50	—
lump, electric-fused, bgs., c.l., works	lb.	.44	—
5-ton lots, works	lb.	.44½	—
1 ton to 9,999-lb. lots, lbs., works	lb.	.45	—
CP, white, grd., bbls., or bgs., works	lb.	1.50	—
lump, electric fused, bgs., 500 to 1,999-lb. lots, works	lb.	.45½	—
smaller lots, works	lb.	.48	—
milled, electric-fused, bgs., c.l., works	lb.	.59	—
5-ton lots, works	lb.	.59½	—
1 ton to 9,999-lb. lots, works	lb.	.60	—
500 to 1,999-lb. lots, works	lb.	.60½	—
smaller lots, works	lb.	.63	—
Oxychloride, cryst., ctns., 5-ton lots, works	lb.	.35½	—

Allied Coast Offices Unite

Allied Chemical & Dye Corporation, New York, has announced that the San Francisco sales offices of its General Chemical, National Aniline and Nitrogen Divisions have been consolidated at 235 Montgomery street.

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Drugs, Fine Chemicals

The most recent price reduction in mono-sodium glutamate or MSG, as it is generally called in the trade, amounted to 4 cents per pound. There have been several downward revisions in the price of this flavoring material over the past year, it was noted, which were generally attributed to a higher degree of competition among domestic producers rather than to any significant amount of competition from lower priced imported material, it was said. The current tariff rate was said to be sufficiently high anough to preclude any real threat of infiltration of the local market by material manufactured abroad, as had, unfortunately been the case of a number of items in the pharmaceutical trade, most notably, synthetic vitamins.

While demand for the sodium salt of 1-glutamic acid was heavy, inquiry for the acid itself was spotty, it was said. Its uses are mainly restrained to the pharmaceutical field. Most of the acid produced goes directly into the manufacture of the mono-sodium salt, it was noted. Export quotations on the acid, however, were lower than those quoted on sales to domestic users although the overall amount sold abroad was also small.

With spring "just around the corner," the tempo of production in a number of industries has begun to perceptibly quicken with a concommitant step-up in demand for a number of chemicals. In this group were the tartrates, sodium benzoate and chemicals used in photography, such as silver nitrate and hydroquinone. The tartrates picture appears bright but it could deteriorate by the continued rise in raw materials costs abroad. The present tense situation in North Africa has resulted in a firm market there on many commodities, argols in particular. European consumption of tartrates and hence argols, has been substantial in recent years with the result that American tartaric acid producers have been forced to pay raw material prices all of which were passed onto the consumer eventually. With the future status of the argols market in doubt, predictions as to the future behavior of tartrate prices here were a matter of conjecture at this time.

The synthetic vitamins group has apparently settled in view of the lack of further price changes in this group last week. Consumption of vitamins, on the whole, continues heavy with supplies adequate to meet trade requirements.

Cream of Tartar—Inquiry continued at a steady pace in the spot market. The approaching warm weather customarily heralds the start of seasonal production in the canning and preserving industries with a concommitant rise in demand for cream of tartar from manufacturers. The current market continues firm in price with supplies about in balance with inquiry. High raw material costs were expected to result in continued firm prices in the finished chemical.

Glutamic Acid—Despite several price reductions in the sodium salt last year, glutamic acid quotations continue unchange. The actual amount of glutamic acid sold as such in this country, was said to be trifling. There is, however, some export demand. Laevo glutamic acid for export was currently priced at $1.80 per pound in comparison to the $2 price tag on acid sold to domestic consumers. Supplies were reported to be adequate to accommodate current consumer needs and expected to continue in the future. By far the greatest percentage of glutamic acid produced, it was said, goes into the manufacture of MSG or mono-sodium glutamate, demand for which is currently running at a brisk rate.

Price Trends

Advanced

None

Reduced

Sodium glutamate, monobasic, 4c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Mar. 11, 1955
65.84	65.84	66.40	67.36

For Current Prices see Page 9

Molasses—Feed molasses markets remained steady with not much change in prices during the week ended February 28, 1956, the U. S. Department of Agriculture reported. At New Orleans blackstrap molasses was unchanged at 13-13½c. per gallon with some futures asking 14c. No sales were reported at the higher level. At Savannah and Jacksonville, prices advanced to $25.65 with prices generally comparable with other East Coast markets. The demand for blackstrap molasses remained good to moderate with the supply generally adequate at most markets. On the West Coast prices were unchanged at $25-$26 per ton, with demand good and supplies adequate.

Saccharin—Demand for saccharin continues at a steady pace, according to producers. Supplies were ample to cover trade requirements and prices unchanged. Although no longer the only artificial, non-caloric sweetening agent available, saccharin consumption remains substantial when contrasted with other like chemicals in a large measure due to its superior price advantage.

Salicylic Acid—The market in USP grade acid was reported to be running at a steady rate in face of the sustained demand for salicylic acid derivatives such as aspirin. Supplies were reportedly adequate to meet trade requirements while prices were firm and unchanged.

Sodium Glutamate—The most recent price reduction on mono-sodium glutamate (MSG) brought the price of that salt down to $1.20 per pound. The latest reduction in a long line of price cuts over the past year amounted to 4c. per pound, it was stated. Producers of mono-sodium glutamate report a heavy to good rate of inquiry. Competition among domestic producers has pushed prices to quite a low level, it was noted and profit margins have shrunk appreciably.

Most of the MSG consumed goes into civilian consumer channels with direct orders from government agencies constituting only a relatively small proportion of the overall total used in this country. It was difficult to tell to what extent the military consumes mono-sodium glutamate in view of the fact that a good deal is consumed indirectly in food preparations bought from suppliers.

While the current low price of MSG is reportedly attractive to food processors, the overall gain in sales was not expected to be appreciable in view of the fact that most food manufacturers are already using maximum percentage concentrates in their products. Supplywise, there appeared to be no difficulty in meeting current demand, it was said and production capacity was estimated to be sufficient to meet any anticipated rise in the overall inquiry.

Tartaric Acid—Demand for tartaric acid was reported to be running at a good rate, on the whole. Soft drink bottlers were expected to begin shifting their production rate into high gear for the forthcoming spring and summer consumer market in soft drinks with a resultant increase expected in the demand for tartaric acid. Prices on the acid were quite firm in face of sustained inquiry and high cost of raw materials. The current tension in North

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Drugs, Fine Chemicals

Africa has helped to maintain world market prices on argols at a high level. Any war in that area could be expected to further boost market quotations, it was feared.

Botanicals

The spot market exhibited some upswing in consumer inquiry, according to trade sources last week. Demand for a number of domestic botanicals was good. With winter almost over, the emphasis on botanicals has begun to swing to those pharmaceuticals which are used in the spring and summer.

Dealers have begun to write contracts for new crop material and the overall outlook, volumewise is for demand to be maintained at about the same level as last year. Inventories have been depleted substantially both in consumer and dealer hands and a number of items were in quite tight supply, such as mandrake root. Lobelia herb was also not too plentiful, it was noted. The weather to date has been normal and no effects, either adverse or salutary, could be attributed to the size of the forthcoming crop, at this early date.

The effects of the new minimum wage of $1 per hour which came into being on March 1 are not expected to prove beneficial to the botanicals market insofar as price are concerned. Since a large number of botanicals gatherers work simply to supplement their scanty incomes, the new minimum wage was expected to eliminate this necessity to some extent. The labor situation is expected to take either of two turns, namely, fewer workers, which will of course mean a smaller crop collection with its two attendent higher prices or an adequate labor force which will demand higher prices for botanicals collected in view of the availability of higher wages in other forms of work such as in the textile mills or furniture factories.

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van Ameringen-Haebler Has Two New Members of Board

Mrs. William T. Haebler and Henry G. Walter, jr., are new members of the board of directors of van Ameringen-Haebler, Inc., New York.

Mrs. Haebler is a director of Kurth Malting Company., Milwaukee, Wis. Mr. Walter, a partner in the law firm of Fulton, Walter & Halley, is also a director of Heyden Chemical Company and St. Maurice Chemical Company, Ltd., Canada.

Mercurial Seed Dressings Manufactured by Gallowhur

Gallowhur Chemical Corporation, Ossining, N. Y., has announced the introduction of a line of organic mercurial seed dressings.

Simultaneously, Larvacide Products, Inc., New York, has been named sales agent to distribute the new line of mercurial seed disinfectants on the west coast.

Schering Picks Ad Manager

Ralph Najarian has been named head of the domestic advertising department of Schering Corporation's advertising division with the title of advertising manager. Mr. Najarian joined Schering in 1941 as a professional sales representative for the company's New England territory. In 1953 he was named assistant advertising manager with headquarters at Schering's home office in Bloomfield, N. J.

Dodge & Olcott Issues Publication Dealing With Flavors and Seasonings

Dodge & Olcott, Inc., New York, has just issued a new publication entitled, "Reference Book and Catalog of Flavors and Seasonings."

The publication contains sections dealing with flavors and seasonings for baked goods, bottlers and syrup extract manufacturers, candy and confectionery, canned goods and condiments, cordials and liquers, dairy products and ice cream, dietetic and low calorie foods, frozen foods, meat and poultry products, pet and animal foods, pharmaceuticals and tobacco. There is an introduction entitled, "A Century and a Half of Flavor," a section on certified colors and a flavor chart and list of all lines.

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AMBER OIL—10 dms, Marine Midland Trust Co, Puerto Cortez
3-AMINO-1,2,4, TRIAZOLE — 100 dms, American Chemical Paint Co, Rotterdam
AMMONIUM BICARBONATE—100 dms, Chemical Manufacturing Co, Middlesbrough
AMYRIS OIL—2 dms, John D Walsh Co, Port au Prince
ANILINE DYES—23 dms, Sandoz Chemical Works, Bremerhaven
72 dms, Geigy Chemical Corp, Havre
24 dms, Sandoz Chemical Works, Havre
18 dms, Hensel Bruckmann & Lorbacher, Rotterdam
5 dms, C A Haynes, Rotterdam
40 dms, Ciba Co, Rotterdam
24 dms, Carbic Color & Chemical Co, Rotterdam
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24 dms, Carbic Color & Chemical Co, Rotterdam
7 dms, Heemsoth Kerner, Liverpool
3 dms, Hensel Bruckmann & Lorbacher, Hamburg
ANNATTO SEED—65 bgs, Irving Trust Co, Callao
112 bgs, Marcel Calvet, Kingston
200 bgs, Ciudad Trujillo
ANTIMONY—22 dms, C P Hull Co, Hull
CONCENTRATES—14 cks, Heidl's Inc, Hamburg
REGULUS—47 cs, Cosmos Shipping Co, Trieste
SULFATE—3 cks, Hummel Chemical Co, Hamburg
ARABIC GUM—254 bgs, Guaranty Trust Co, Port Sudan
510 bgs, Hanover Bank, Port Sudan
254 bgs, Bank of N Y, Port Sudan
ARSENIC, METALLIC—42 dms, C Tennant Sons & Co, Avonmouth
ASBESTOS FIBER—600 bgs, Johns Manville Corp, Lourenco Marques
5,000 bgs, North American Asbestos Corp, Lourenco Marques
BARBASCO ROOT—120 bgs, National City Bank, Callao
237 bls, National City Bank, Callao
49 bgs, Ciba Pharmaceutical Products, Puerto Barrios
549 bgs, Hecht Levis & Kahn, Callao
BEEF EXTRACT—40 cs, Wilson & Co, Santos
BEESWAX—100 bgs, River Plate Corp, Rio de Janeiro
104 bgs, H H Pike & Co, Tampico
23 bgs, Hollander Trading Co, Port au Prince
25 bgs, Lenape Trading Co, Santiago
60 bgs, Porcella Vicini & Co, Puerto Plata
11 bgs, Irving Trust Co, Sanchez
34 bgs, Curacao Trading Co, Ciudad Trujillo
125 bgs, S Zeitlins Sons, Santos
30 bgs, Schutte & Focke, Ciudad Trujillo
42 bgs, Puerto Barrios
BENZOIN GUM—9 cs, Olson Sales Agency, Bangkok
BERGAMOT OIL—12 cs, Noville Essential Oil Co, Messina
BILE, OX—5 dms, Durban
BISMUTH—36 bxs, Cerro de Pasco Corp, Callao
BLANC FIXE—42 cks, Liverpool
BUTTONLAC—50 bgs, Calcutta
CALCIUM CARBONATE, PRECIPITATED — 400 bgs, H J Baker & Bro, Liverpool
TARTRATE—5,600 bgs, Bunge Corp, Buenos Aires
CAMPHOR OIL—10 dms, Givaudan Corp, Kobe
POWDER—250 cs, Irving Trust Co, Keelung
CARAWAY OIL—2 dms, Magnus Mabee & Reynard, Rotterdam
6 dms, Fritzsche Bros, Rotterdam
SEED—250 bgs, Rotterdam
CARDAMOM SEED—20 cs, Calcutta
CARNAUBA WAX—814 bgs, Biddle Sawyer Corp, Tutoia
1,188 bgs, F Henjes Jr, Tutoia
251 bgs, Frank B Ross, Tutoia
425 bgs, River Plate Corp, Tutoia
213 bgs, Smith & Nichols, Tutoia
50 bgs, M Argueso & Co, Tutoia
534 bgs, Frank B Ross, Fortaleza
111 bgs, Wm Diehl & Co, Fortaleza
88 bgs, Cornelius Wax Refining, Fortaleza
112 bgs, Cornelius Wax Refining, Areia Branca
450 bgs, Areia Branca
33 bgs, J H Schroder, Fortaleza
63 bgs, Dura Commodities Corp, Rio de Janeiro
CASEIN—1,000 bgs, East Asiatic Co, Buenos Aires
1,500 bgs, Borden Co, Buenos Aires
CASSIA—187 bls, J F Frank, Rotterdam
303 bls, Lansen Naeve, Rotterdam
170 bls, Knickerbocker Mills, Rotterdam
354 bls, A G Dunn, Rotterdam
359 pkgs, Rotterdam
CASTOR OIL—608 tons, Recife
CETYL ALCOHOL—60 ctns, Liverpool
CHESTNUT EXTRACT—600 bgs, Barkey Importing Co, Genoa
CHLORINATED RUBBER—200 bgs, C M C Chemicals Inc, Liverpool
CINNAMONBARK OIL—4 cs, George Lueders & Co, Colombo
CINNAMONLEAF OIL—5 dms, Dodge & Olcott, Colombo
CINNAMON QUILLS—30 bls, Lo Curto & Funk, Colombo
50 bls, Fritzsche Bros, Colombo
CITRONELLA OIL—5 dms, Lo Curto & Funk, Keelung
CLAY—1,200 bgs, Avonmouth
CLOVE—200 bgs, Shippers Produce Corp, Tamatave
600 bgs, George Lueders & Co, Tamatave
200 bgs, R T French, Tamatave
100 bgs, Lo Curto & Funk, Tamatave
420 bgs, G M Fakra, Tamatave
357 bgs, L A Champon & Co, Tamatave
OIL—15 dms, Ungerer & Co, Tamatave
CLOVELEAF OIL—32 dms, Ungerer & Co, Tamatave
9 dms, G M Fakra, Tamatave
48 dms, Trubeck Lab, Tamatave
9 dms, L A Champon & Co, Tamatave
14 dms, Ufinindo International Corp, Tamatave
COALTAR DYES—16 dms, Geigy Chemical Corp, Rotterdam
8 dms, Anderson Trading Co, Rotterdam
44 cks, Geigy Chemical Corp, Rotterdam
COCONUT OIL—350 tons, American Trust Co, Zamboanga
349 tons, Cargill Inc, Manila
909 tons, Manila
COD OIL—100 dms, Ottol Oil Co, St Johns
100 dms, Atlas Refinery, Bergen
CODLIVER OIL—100 dms, Arista Oil Products Co, Alesund
COPAL GUM—667 bgs, O G Innes Corp, Matadi
36 bkts, D Hecht & Co, Singapore
395 bkts, O G Innes Corp, Macassar
617 bgs, Matadi
COPPER SULFATE—785 bgs, American Firstoline Corp, San Antonio
CORIANDER SEED—300 bgs, Buenos Aires
CORN STARCH—200 bgs, Rotterdam
COTTON LINTERS—2,142 bls, Antwerp
CRESYLIC ACID—25 dms, Koppers Co, Liverpool
CURARE—15 cs, Callao
CUTTLEFISH BONE—650 cs, Marseille
400 cs, Venice
DAMMAR GUM—220 bgs, S Winterbourne & Co, Singapore
DEXTRIN—200 bgs, Commercial Envelope Co, Rotterdam
40 bgs, Stein Hall & Co, Rotterdam
DIVI DIVI—2,299 seroons, Merichal-Kesez, Ciudad Trujillo
DOGWOOD BARK—100 bls, Lydia Pinkham, Kingston
150 bgs, S B Penick & Co, Kingston
EARTH COLORS—450 bgs, Reichard Coulston, Bremen
EGG ALBUMEN—5 dms, Richards International Ltd, La Guaria
ELEMI GUM—132 cs, S Winterbourne & Co, Manila
FENUGREEK SEED—100 bgs, Wm E Martin, Karachi
FERRIC PEPTONATE—10 dms, Hudson Shipping Co, Liverpool
SULFATE—50 dms, Hudson Shipping Co, Liverpool
FISH LIVER OIL—5 dms, Arista Oil Products Co, Yokohama
13 dms, Bankers Trust Co, Yokohama
7 dms, Yokohama
FISHMEAL—2,800 bgs, Marine & Animal By-Products Corp, Iquique
FUEL OIL—99,082 bbls, Esso Standard Oil Co, Las Piedras
104,610 bbls, Central Petroleum Corp, Punta Cardon
684,619 bbls, Esso Standard Oil Co, Aruba
10,000 bbls, Asiatic Petroleum Corp, Curacao
109,381 bbls, Paragon Oil Co, Punta Cardon
112,383 bbls, Metropolitan Petroleum Corp, Punta Cardon
89,314 bbls, Esso Standard Oil Co, Caripito
73,080 bbls, Esso Export Corp, Caripito
104,547 bbls, Paragon Oil Co, Tampico
134,641 bbls, Metropolitan Petroleum Corp, Pointe a Pierre
118,375 bbls, Paragon Oil Co, Curacao
FULLERS' EARTH—100 bgs, L A Salomon & Bro, Avonmouth
GALL, OX—6 dms, Merck & Co, Santos
GELATIN—100 bgs, T M Duche & Sons, Antwerp
170 bbls, Coignet Chemical Co, Antwerp
2 dms, Jung Forwarding Co, London
47 kgs, G G Lippelgoes, Hull
100 bgs, Hensel Bruckmann & Lorbacher, Rotterdam
45 dms, Hensel Bruckmann & Lorbacher, Rotterdam
GINGER—232 bgs, Shippers Produce Corp, Kingston
133 bgs, Karl H Landes & E Balint, Kingston
36 bgs, A G Dunn, Kingston
181 bgs, Wm E Martin, London
120 bgs, Wm E Martin, Cochin
80 bgs, Cochin
240 bgs, Murwal Inc, Apapa
234 bgs, Lagos
80 bgs, Irving Trust Co, Cochin
80 bgs, J H Schroder, Alleppey
120 bgs, Irving Trust Co, Alleppey
880 bgs, Alleppey
GLUE—400 bgs, M Corbett, Marseille
114 cs, M Corbett, Marseille
30 bgs, Jung Forwarding Co, Liverpool
BONE—563 bgs, Transatlantic Animal By Products Corp, Rotterdam
STOCK—1,150 bls, A M Golstein, Barranquilla
GRAPHITE—250 bgs, Superior Graphite Co, Colombo
250 bgs, Asbury Graphite Mills, Colombo
250 bgs, C Pettinos, Colombo
2,520 bgs, Asbury Graphite Mills, Tamatave
2,950 bgs, Joseph Dixon Crucible Co, Tamatave
3,250 bgs, C Pettinos, Tamatave
GYPSUM—12,865 tons, U S Gypsum Co, Hantsport
100 bgs, A Gusmer, London
HERRINGMEAL—720 bgs, Wilbur Ellis Co, Bergen
HOLEAF OIL—3 dms, Van Ameringen Haebler, Hong Kong
4-HYDROXYISOPHTHALIC ACID—10 kgs, H A Gogarty, Liverpool
IODINE, CRUDE—20 kgs, National City Bank, Yokohama
328 kgs, Antony Gibbs & Co, Tocopilla
IRON CARBONYL—54 dms, Rotterdam
JABORANDY LEAVES—70 bls, Inland Alkaloid Co, Tutoia
KARAYA GUM—61 bgs, P A Dunkel, Bombay
715 bgs, Wernet Dental Manufacturing Co, Bombay
67 bgs, S B Penick & Co, Bombay
268 bgs, Colony Import & Export Corp, Bombay
KOLA NUTS—139 bgs, D Steengrafe & Co, Kingston
143 bgs, J A Manton, Kingston
369 bgs, Lagos
LAUREL LEAVES—46 bls, Atlanta Textile Corp, Izmir
LEMON OIL—200 cs, Dodge & Olcott, Messina
LEMONGRASS OIL—4 dms, Chemical Bank, Cochin
30 dms, Lo Curto & Funk, Puerto Barrios
25 dms, Puerto Barrios
LOCUSTBEAN GUM—508 bgs, Irving Trust Co, Barcelona
100 bgs, Guaranty Trust Co, Rotterdam
35 dms, Rotterdam
LOGWOOD EXTRACT—30 cks, American Dyewood Co, Kingston
MACE—13 cs, Chemical Bank, Rotterdam
29 cs, Shippers Produce Corp, Singapore
33 cs, Rotterdam
MAGNESITE—418 bgs, Golwynne Chemical Corp, Madras
3,642 bgs, Golwynne Chemical Corp, Cochin
MANGANESE ORE—448 bgs, Union Carbide & Carbon Co, London
MANGROVE BARK—1,700 bgs, Bank of N Y, Cristobal
MARJORAM LEAVES—80 bgs, M J Golombeck, Marseille
MASTIC GUM—8 cs, D Costalos, Piraeus
MENTHOL—55 cs, Schwabach & Co, Santos
50 cs, George Uhe Co, Santos
MERCURIC CYANIDE—4 dms, Lo Curto & Funk, Southampton
MERCURY—50 flks, Lo Curto & Funk, Tampico
MOLASSES—725,479 gals, Southwestern Sugar & Molasses Co, Barahona
749,095 gals, Southwestern Sugar & Molasses Co, San Pedro de Macoris
550 tons, W R Grace & Co, Salaverry
MONTAN WAX—100 bgs, Koster Keunen, Rotterdam
MUSTARD OIL—10 cs, Lo Curto & Funk, Hamburg
SEED—1,000 bgs, Catania
MYROBALANS—762 bgs, Hammond & Carpenter, Bombay
POWDER—600 bgs, Olson Sales Agency, Hull
NAPHTHALENE—1,534 bgs, American Cyanamid Co, Middlesbrough
542 bgs, American Cyanamid Co, Rotterdam
334 bgs, Marine Midland Trust Co, Avonmouth
1,631 bgs, Avonmouth
500 bgs, Antwerp
NAPHTHENIC ACID—2,256 bbls, Esso Standard Oil Co, Aruba
NICKEL CHLORIDE—3 cks, James E Fox, London
SULFATE—15 dms, Cosmos Shipping Co, Genoa
40 bbls, D Hauser, Kristiansand
60 bbls, Kristiansand
12 bgs, Antwerp
NUTMEG—42 bgs, Internatio Rotterdam, Singapore
243 bgs, Shippers Produce Corp, Padang
168 bgs, Borneo Sumatra Trading Co, Singapore
112 bgs, Mincing Trading Corp, London
8 bgs, Karl H Landes & E Balint, Colombo
250 bgs, J H Schroder, Rotterdam
27 bgs, Rotterdam
OAKMOSS—84 bls, Credit Suisse, Rijeka
OCOTEA CYMBARUM OIL—26 dms, Bemo Shipping Co, Rio de Janeiro
4 dms, Santos
OITICICA OIL—300 tons, Archer Daniels Midland Co, Fortaleza
OLIVE OIL—500 bgs, Chase Manhattan Bank, Barcelona
165 dms, National City Bank, Barcelona
250 dms, National City Bank, Seville
96 dms, Manufacturers Trust Co, Seville
48 dms, First National Chicago, Seville
148 dms, Seville
OPIUM—150 cs, Mallinckrodt Chemical Works, Istanbul
ORANGE OIL—3 cs, Magnus Mabee & Reynard, Kingston
15 cs, George Lueders & Co, Kingston
10 cs, Fritzsche Bros, Kingston
40 cs, Ungerer & Co, Kingston
10 cs, Van Ameringen Haebler, Kingston
OURICURY WAX—111 bgs, Marine Midland Trust Co, Rio de Janeiro
PALM OIL—523 tons, Balfour Guthrie, Matadi
PALMKERNEL OIL—199 tons, Matadi
PAPAIN—6 cs, Chas L Huisking & Co, Mombasa
PAPRIKA—711 bgs, Rijeka
PARSLEY SEED—20 bgs, F W Woodruff & Sons, London
PATCHOULI OIL—5 cs, Kane Import Corp, Penang
5 cs, George Lueders & Co, Penang
PEATMOSS—500 bls, Trans Sphere Trading Co, Bremen
2,300 bls, E Dunwoody, Bremen
500 bls, Marine Midland Trust Co, Bremen
500 bls, Lewis Intern Co, Bremen
1,500 bls, Bruco Peatmoss Corp, Bremen
4,765 bls, Premier Peatmoss Corp, Bremen
1,123 bls, E J Lang, Hamburg
500 bls, Premier Peatmoss Corp, Copenhagen
3,900 bls, J E Bernard, Hamburg
500 bls, Bruco Peatmoss Corp, Hamburg
PENTANOL—4 dms, Aceto Chemical Co, Hull
PEPPER, BLACK—80 bgs, East India Trading Co, Cochin
80 bgs, Guaranty Trust Co, Cochin
140 bgs, A C Israel, Singapore
420 bgs, Polak Trading Co, Singapore
420 bgs, E H Simpson & Co, Singapore
80 bgs, C Czarinkow, Cochin
120 bgs, Polak Trading Co, Cochin
240 bgs, A G Dunn, Cochin
160 bgs, Otto Gerdau, Colombo
40 bgs, Volkart Bros, Alleppey
360 bgs, Far Eastern Rubber Importers, Singapore
510 bgs, Borneo Sumatra Trading Co, Singapore
240 bgs, A G Dunn, Singapore
190 bgs, East India Trading Co, Singapore
60 bgs, Volkart Bros, Singapore
180 bgs, Singapore
680 bgs, Alleppey
PEPPER, RED—263 bgs, Ludwig Mueller, Iskenderun
240 bgs, Otto Gerdau, Kingston
80 bgs, Shippers Produce Corp, Kingston
160 bgs, A G Dunn, Kingston
309 bgs, S B Penick & Co, Lagos
145 bgs, Mombasa
400 bls, Yokohama
WHITE—140 bgs, E H Simpson & Co, Singapore
PERU BALSAM—3 dms, Dodge & Olcott, La Libertad
3 dms, Polak Frutal Works, La Libertad
PETROLEUM, CRUDE—61,724 bbls, Esso Standard Oil Co, La Salina
48,008 bbls, Esso Standard Oil Co, Las Piedras
517,000 bbls, Esso Standard Oil Co, Puerto La Cruz
15,657 tons, Hess Inc, Las Piedras
102,835 bbls, Hess Inc, Las Piedras
PHOSPHOMOLYBDIC ACID—1 cs, London
PIMENTOLEAF OIL—2 dms, Magnus Mabee & Reynard, Kingston
4 dms, W J Bush & Co, Kingston
3 dms, Ungerer & Co, Kingston
POLLACKLIVER OIL—100 dms, Bankers Trust Co, Yokohama
100 dms, Yokohama
POLYVINYL CHLORIDE—5,988 bgs, National City Bank, Venice
POTASSIUM CYANIDE—178 dms, Chemical Manufacturing Co, Liverpool
PYRETHRUM EXTRACT—30 dms, P H Petry, Mombasa
FLOWERS—125 bls, Gulf Oil Corp, Dar es Salaam
QUEBRACHO EXTRACT — 3,796 bgs, Tanimex Corp, Buenos Aires
1,546 bgs, River Plate Corp, Buenos Aires
50 bgs, Tanimex Corp, Hull
RAUWOLFIA ROOT—386 bgs, Select Trading Co, Matadi
RHATANY ROOT—71 bgs, Callao
RICE STARCH—80 bgs, Stein Hall & Co, Bremen
SAGE LEAVES—360 bls, S A I M A Inc, Trieste
SALICYLIC ACID—5 dms, Rotterdam
SANDARAC GUM—1 cs, Dumont Shipping Co, Genoa
SEEDLAC—82 bgs, Grace National Bank, Bangkok
500 bgs, Wah Chang Corp, Bangkok
500 bgs, Chase Manhattan Bank, Bangkok
250 bgs, Gillespie Rogers Pyatt, Bangkok
1,750 bgs, East Asiatic Co, Bangkok
168 bgs, Haeuser Shellac Co, Bangkok
300 bgs, Calcutta
SESAME OIL—30 ctns, Bohea Trading Co, Kobe
SEED—4,332 bgs, Independent Halvah & Candies, Cutuco
1,000 bgs, Louis Furth, Santos
112 bgs, Barclays Bank, Alexandria
SHELLAC—27 cks, F H Paul & Stein Bros, Rotterdam
41 bgs, F H Paul & Stein Bros, Hamburg
100 bgs, Gillespie Rogers Pyatt, Calcutta
150 bgs, C H Timm, Calcutta
550 bgs, Calcutta
SOAPNUT SHELLS—101 bgs, S B Penick & Co, Bombay
SODIUM CYANIDE—250 dms, Chemical Manufacturing Co, Liverpool
FERROCYANIDE—448 bgs, Antwerp
NITRATE—3,000 tons, Guaranty Trust Co, Tocopilla
SILICOFLUORIDE — 334 bgs, Chemical Bank, Kobe
500 bgs, Chase Manhattan Bank, Venice
500 bgs, Riches Nelson, Rotterdam
100 bbls, Rijeka
SPERM OIL—250 tons, Chase Manhattan Bank, Bergen
26 dms, Glasgow
STARCH—150 bgs, Morningstar Nicol, Rotterdam
400 bgs, Rotterdam
STYRAX GUM—77 cs, Meer Corp, Izmir
TALC—4,680 bgs, Charles Mathieu, Genoa
TAPIOCA—400 bgs, American Key Products, Itajai
FLOUR—2,501 bgs, Stein Hall & Co, Bangkok
406 bgs, Bankers Trust Co, Bangkok
2,000 bgs, Harry F R Dolan Jr, Itajai
661 bgs, American Metagraph Co, Itajai
3,630 bgs, Stein Hall & Co, Itajai
TARA SEED—285 bgs, Callao
THYME LEAVES—84 bgs, Louis Furth, Marseille
50 bls, H Marmorek & Son, Marseille
TRICHLOROETHYLENE—1,000 dms, Miny Corp, Venice
8 dms, Averst Lab, Liverpool
TURKEY RED OIL—1 cs, Eagle Pencil Co, London
ULTRAMARINE BLUE—240 bgs, Whittaker Clark & Daniels, Hull
50 dms, Fezandie & Sperrle, Rotterdam
UREA—1,900 bgs, Nylos Trading Co, Genoa
SYNTHETIC—4,000 bgs, Chemical Manufacturers Co, Middlesbrough
VANILLA BEANS—113 cs, Thurston & Braidich, Antalaha
25 cs, R L Oppenheimer, Antalaha
39 cs, Lo Curto & Funk, Antalaha
96 cs, F Huber & Co, Antalaha
173 cs, G M Fakra, Antalaha
72 cs, Williams Clark Co, Antalaha
VEGETABLE OIL—3 cs, Ungerer & Co, London
VETIVER OIL—1 dm, Lautier Fils Inc, Port Au Prince
WHITING—800 bgs, Smith Chemical & Color Co, Hull
1,000 bgs, Whittaker Clark & Daniels, London
2,400 bgs, Antwerp
WITHERITE—112 tons, E I Dupont De Nemours & Co, Middlesbrough
WOOL GREASE—90 dms, Hudson Shipping Co, Antwerp
16 cs, Hummel Chemical Co, Rotterdam
53 dms, Antwerp
WAX—4 dms, Olympic Shipping Co, Liverpool

Baltimore

FISHMEAL—300 bgs, B & W Vorhaus, San Vincente
GLYCERINE—178 dms, Lever Bros, Matadi
PEPPER, BLACK—400 bgs, Otto Gerdau, Cochin

Boston

HOOF, HORNMEAL—169 bgs, Wessel Duval & Co, Buenos Aires

Los Angeles

AGAR—22 cs, Pan Asiatic Trading Co, Yokohama
CASEIN—2,000 bgs, John R Spellacy, Melbourne
200 bgs, Tupman Thurlow Co, Buenos Aires
COPAL GUM—70 bgs, Henry A Peabody, Manila
COPRA—1,500 long tons, American Trust Co, Cebu
500 long tons, Procter & Gamble Co, Cebu
CAKE—2,240 bgs, Balfour Guthrie & Co, Manila
PAPRIKA—20 bgs, Hirasaki Farms, Kobe
PEATMOSS—500 bls, H V Nootbaar Co, Bremen
750 bls, John Schumacher Co, Bremen
250 blocks, Nurserymen's Exchange Co, Bremen
PETROLEUM, CRUDE—157,220 tons, General Petroleum Corp, Puerto La Cruz
26,907 tons, Union Oil Co, Puerto La Cruz
QUEBRACHO EXTRACT—553 bgs, River Plate Corp, Buenos Aires
1,000 bg, International Products Corp, Buenos Aires
WHITING—2,000 bgs, L H Butcher Co, Antwerp

Philadelphia

AMMONIUM CHLORIDE—997 bgs, Chemical Manufacturing Co, Liverpool
400 bgs, Keer Maurer, Liverpool
ANTIMONY REGULUS—144 cs, Rijeka
ASBESTOS FIBER—1,300 bgs, Ehret Manufacturing Co, Lourenco Marques
7,140 bgs, Chas Kurz Co, Lourenco Marques
600 bgs, Johns Manville Corp, Lourenco Marques

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ASBESTOS FIBER—2,240 bgs, Chas Kurz Co, Durban
880 bgs, Keasby & Mattison, London
224 bgs, John Holt & Co, Lourenco Marques
900 bgs, Lourenco Marques
BALL CLAY—400 tons, Moore & Munger, Avonmouth
550 tons, Paper Makers Co, Avonmouth
200 tons, United Clay Co, Avonmouth
BEEF EXTRACT—1,150 cs, International Packers Ltd, Buenos Aires
320 cs, Buenos Aires
BONE—879 bgs, Ovimpex Inc, Buenos Aires
CALCIUM CARBONATE—300 bgs, Baker Bros, Avonmouth
CLAY—4,800 bgs, Avonmouth
40 tons, Avonmouth
COCONUT OIL—373 tons, Manila
CUTTLEFISH BONE—100 cs, R T French, Kobe
EPSOM SALT—400 bgs, Bremen
GLYCERINE—40 dms, Bunge Corp, Yokohama
GRAPHITE—1,000 bgs, Asbury Graphite Mills, Tamatave
GYPSUM—4,610 tons, U S Gypsum Co, Deep Brook
HORNMEAL—1,387 bgs, A M Goldstein, Buenos Aires
LICORICE ROOT—5,800 bls, Izmir
LOCUST BEAN GUM—110 bgs, Naples
MOLASSES—2,107 tons, Southwestern Sugar & Molasses Co, Fort de France
371,450 gals, Southwestern Sugar & Molasses Co, Bridgetown
NAPHTHALENE—1,899 bgs, Gallard Schlesinger, Antwerp
1,090 bgs, Antwerp
2,222 bgs, Rotterdam
PEATMOSS—2,984 bls, Premier Peatmoss Corp, Bremerhaven
1,000 bls, Keer Maurer, Bremerhaven
1,000 bls, Lion Trading Co, Bremerhaven
78 bls, Sundberg Inc, Gothenburg
400 bls, New England Import Co, Bremen
500 bls, Lewis Intern Co, Hamburg
1,000 bls, C Fafard, Bremerhaven
150 bls, E Dunwoody, Bremen
500 bls, New Amsterdam Import Co, Bremen
1,500 bls, Hamburg
PETROLEUM, CRUDE—345,835 Atlantic Refining Co, Amuay Bay
118,607 bbls, Atlantic Refining Co, Puerto La Cruz
117,007 bbls, Atlantic Refining Co, Pamatacual
196,540 bbls, The Texas Co, Sidon
340,266 bbls, The Texas Co, Las Piedras
185,170 bbls, Gulf Oil Corp, Puerto La Cruz
256,572 bbls, Cities Service Oil Co, Mena Al Ahmadi
145,863 bbls, Socony Mobil Oil Co, Covenas
RUTILE SAND—4,987 bgs, Union Carbide Corp, Brisbane
SHELLAC—50 bgs, Mac Lac Co, Calcutta
SODIUM BICARBONATE—1,500 bgs, Chemical Manufacturing Co, Liverpool
TANNING EXTRACT—700 bgs, American Dyewood Co, Bordeaux
TAPIOCA FLOUR—833 bgs, Manhattan Paste & Glue Co, Itajai
540 bgs, Stein Hall & Co, Itajai
UREA—500 bgs, Nylos Trading Co, Genoa
SYNTHETIC—4,000 bgs, Chemical Manufacturing Co, Glasgow
VANILLA BEANS—69 cs, Camax Co, Antalaha
351 cs, Zink & Trieste, Antalaha
WHITING—36 tons, Antwerp
YACCA GUM—229 bgs, Chase Manhattan Bank, Port Adelaide
ZINC OXIDE—1,199 bgs, Pigment Chemical Co, London
PERTUSOL — 100 tons, International Selling Corp, Genoa
ZIRCON SAND—29,087 bgs, Brisbane

San Francisco

AMMONIUM CHLORIDE—1,692 bgs, C M C Chemicals, Manchester
ANISE SEED—50 bgs, Bank of California, Naples
ASBESTOS FIBER—5,600 bgs, Keasby & Mattison, Lourenco Marques
712 bgs, John Holt & Co, Lourenco Marques
800 bgs, Durban
CALCIUM CHLORIDE—898 bgs, C M C Chemicals, Manchester
NITRATE—18,000 bgs, Wilson & Geo Meyer & Co, Herova
9,950 bgs, Atkins Kroll & Co, Antwerp
CASSIA—465 bls, Borneo Sumatra Trading Co, Tandjong Priok
CLOVE—100 bls, First National Boston, Dar es Salaam
COPAL GUM—30 bgs, H M Newhall & Co, Manila

—Continued on page 59

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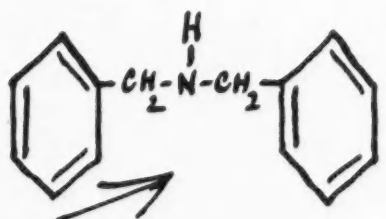

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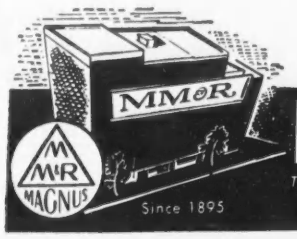

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Essential Oils, Aromatics

Reports of the damage done by the cold snap in southern Europe filtered in all last week. One producer reported damage of up to $1,500,000 to the orange blossom crop alone. The area hit by the late cold weather, southern France and northern Italy, reportedly will be two or three years recovering from crop, plant and tree damage. Alongside of the orange blossom crop, one of the strongest hit crops was that of neroli. Prices on spot have gone out of sight, dealers here noted.

Higher prices are being forecast in some quarters for the near future in such items as sage, rosemary, Spanish eucalyptus, which also have reportedly been severely damaged by the cold snap.

Dealers contended that spot prices for citronella and lemongrass grew a bit firmer last week as the result of a stronger statistical position for nearby supplies. Foreward shipments, however, were said to be available at widely ranging discounts based on expectation of new crop arrivals in the not too distant future. Formosan citronella prices for March-April reportedly stood at $1.92 per pound with the July listing being quoted at $1.75. The spot price at present is about $2.15 per pound, or 5c per pound higher than previously quoted.

An important trend reported by one major producer is the advancing development of the liquid detergent market. Extensive use use of fruit, spice and other essential oils, chose through their lack of variance with food aromas, should mean development along year round lines for those markets.

Price Trends

Advanced

Celery seed, French, 1c. per lb.
Indian, ½c. per lb.
Oil, citronella, Java-type, 5c. per lb.
Pimento, Mexican, 1c. per lb.

Reduced

Clove, Madagascar, 1c. per lb.
Coriander, Moroccan, ½c. per lb.
Ginger, Jamaica #2, 1c. per lb.
#3, 1c. per lb.
Nigerian split, 1c. per lb.
Oil, cumin, 25c. per lb.
Dillweed, domestic, 40c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Mar. 11, 1955
135.17	135.23	134.50	138.26

For Current Prices see Page 9

Essential Oils

Cedarwood—This oil was reportedly easier last week with the present listing of 70c. per pound indicating a sharp decline from the 95c. per pound of six months previous. However, the time differential between the lumber season and the stocks of supply on spot lead some dealers to suggest that supply limitations in the next month might firm the market as a whole.

Citronella Oil—1954 production of citronella oil on Formosa and Java, according to one major producer, was the unsatisfactory prices which had been offered in 1953 and the early part of 1954. By the beginning of 1955, it was noted, demand began to equalize or even exceed supply. Prices rose steadily and by April, the report said, the spot price reached $1.90 per pound (as compared with the 72c. to 75c. quotes for April, 1954, and the 46c. to 50 range for April, 1953.

High prices tend to stimulate production and consequently trade circles expected Formosa to produce a maximum amount in 1955. Also, the report continued, Guatemala, encouraged by the high price which Formosa obtained, resumed the cultivation of citronella grass. The state was set for increasing supplies and with it a normalizing of the price of citronella oil. But, as usually happens in the oils market, reality mocked the theory. No appreciable weakening manifested itself and prices remained strong. The reasons for this, as cited in the report, were:—

a) A severe drought reduced the first cutting of grass, and also the fall/winter crop was hampered by lack of sufficient rain. Citronella like all grasses needs plenty of moisture to reach full height. If short grass has to be distilled the yield of oil per acre of land is severely reduced.

b) As long as production does not exceed demand, no heavy stocks accumulate at the source, which would force the holders to make price concessions; in fact, as long as prices remain high, oil in stock is as good as a bank note.

c) While Guatemala has recultivated citronella, the new fields did not yet furnish a high yield in 1955. Full crops are not expected before the second half of 1956. Although production figures are not complete yet, the estimate is that Guatemala's output was limited and that most of the oil was shipped against one early and large contract so that little was offered in open competition with Formosa. In short: Guatemala's output did not exert a price regulating influence on the citronella market.

Cumin—Oil of cumin seed eased perceptibly last week, it was reported. Dealers noted a price decline of 25c. per pound on the inside, giving the material a range of $5 to $5.75 per pound.

Dillweed—A major producer announced price deductions in this oil, effective March 2, it was reported last week. The new listing runs to a range of $2.85 per pound for sales of 5 drums (400 pounds each) to $3.65 per pound for 5 pound bottles. Other listings within the range were, 2 to 3 drums, $2.87 per ½ pound; 1 drum, $2.90 per pound; 100 pound drum, $3 (with the drum extra and non-returnable at $3). The listing for 25 case lots was $3.05 (case is 70 pounds, containing two 35 pound cans); 10-15 case lots, $3.10; 5 case lots, $3.12½ per pound; 1 case, $3.15 per pound; 35 pound can, $3.25 per pound; 25 pound can, $3.30 per pound, 10 pound can, $3.50 per pound, and a 5 pound bottle, $3.65.

A competitive situation and sizable supplies reportedly prompted the reduced prices on the dillweed. Normally the commodity doesn't come into its seasonal peak for another couple of months.

Lemon—Fear of crop damage by the late winter cold prevailed for Italian quality material in this market, as it does for a number of other European essential oils, dealers reported. The situation is somewhat confused, however, inasmuch as certain Italian reports indicate that the southern half of the country did not suffer overly from the frosts and cold while other reports of a contradictory nature have been received.

Lemongrass—1955 again showed a strong lemongrass oil market, according to one major producers report. The market, in holding itself high, defied earlier predictions of price declines. These predictions, it was noted, were based on an anticipated heavy production stimulated

Imports Detained at N. Y.

Week Ended February 24

New York

Black Pepper (9 lots), 478 bags.
Coriander Seed, 180 bags.
Chillies (2 lots), 272 bags.
Cloves (26 lots), 3,231 bags.
Cassia (16 lots), 1,301 bags.
Gum Karaya (6 lots), 146 bags.
Mace (4 lots), 50 cases.
Nutmegs (9 lots), 511 bags.
Oregane Leaves, 500 bags.
Paprika, 100 bags.
Rosemary Leaves, 36 bags.
Sesame Seed (5 lots), 803 bags.

by the prevailing good prices. However, a large quantity of material did not show up on the market. Some sources, the report said, claimed that climatic conditions were not ideal for bumper crop; others voiced suspicions that the oil was there but withheld for the market by clever speculation. The answer, according to the producers report, lies somewhere between the two extremes.

Neroli—Reported crop damage at source has virtually driven this commodity out of sight on the spot market, it was reported last week. Though most dealers have withdrawn their material off the selling block, some dealers have continued to list at prices ranging up to $350 per pound. No detailed report has been forthcoming as to just how extensive the crop damage was. There can be no relief for the spot market situation, dealers noted, until this information is available.

Patchouli—A somewhat easier position was reported for this oil last week, dealers said. This was attributed to an accumulation of stocks here and in the source areas, coupled with a desire on the part of dealers and other holders to rid themselves of their stocks. A spot price of $7.25 per pound was reported and bulk lots were going for less.

Petitgrain — No movement was noted in this market last week as most dealers appear to be waiting for some move from the Paraguan government, it was reported. An anticipated devaluation of the guarani (present rate of exchange: 4.76c.) has prompted most dealers to await further development.

Aromatic Chemicals

One major producer announced last week the development of two aromatic chemicals to replace essential oil material destroyed in the southern European cold snap. The two chemicals, the producer reported, are virtually absolute approximations of orange blossom and neroli oils. One, under the trade name of Nerolyol-632, will be on the market at $25 per pound.

Miscellaneous

Celery Seed—Both grades of celery showed some firmness in the market last week, dealers here reported. French quality seed was going at a 29c-29½c. per pound range, a 1c. advance over the previous listing, while Indian quality celery seed was sold at a 17c.-17½c. per pound range, a ½c. per pound advance over the previous week's quote. Dealers attributed the advance into the European cold weather spell of the past weeks.

Cinnamon—Despite the failure of this market to move in price last week, dealers continue to report a firm condition throughout. The market's position continues to hinge on foreign demand and the resultant heavy export figures.

Ginger — Softness touched the market in three price listings last week, dealers reported. Both qualities of Jamaican ginger and the Nigerian split dropped in price. All three listings declined 1c. per pound each from the previous quotes. Dealers attribute the decline to heavy stocks on spot.

Paprika—Bureau of Census figures for 1955 show a nearly 100,000 pound increase in imports over the figure for the previous year, it has been reported. The 1955 total of 8,631,000 was comprised of an estimated total for the last two months of the year (1,182,000 pounds) coupled with the real figure for the first ten months of 7,449,000 pounds. The 1954 total was 7,866,000 pounds. The average figure for the 1949-1953 period was even lower at 7,530,000 pounds.

Pepper—A very easy period was reported for this commodity last week. Foreign markets reportedly held their ground to a degree but spot prices and demand continued to show a steady flabbiness. At times it almost appears, one dealer noted, that future deliveries, March/July were only available at a premium over spot levels. A comparison of imports during the first two months of the last few years explain in part why spot levels are depressed. We are in the process of consuming these arrivals and the only cheerful side of the picture is the trend toward smaller imports each month.

	1954 tons	1955 tons	1956 tons
Jan.	1059	1978	1969
Feb.	1470	1300	1455
March	1091	1171	1000

Consuming demand for white pepper has not been sizable enough to maintain any particular premium for spot supplies over afloat or shipment positions. For this reason, there has been very little incentive to bring further quantities forward and in time the market should reflect this. Present stocks are adequate but no heavy shipments are expected before June.

Sage—Imports into the United States last year were estimated at 1,608,000 pounds, according to a Bureau of Census report. This figure included actual total imports for the first ten months of the year (1,042,000 pounds) coupled with an estimated figure (566,000 pounds) figure for the final two months. This figure reflects a good increase over the 1954 figure of 1,432,000 pounds imported, and also shows a very strong increase over the 1,039,000 average computed for the 1949-1954 period.

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Coatings Materials

The market for prime pigments was uneven, with spring buying commencing in some materials while in others interest was lagging. Lead pigment sales varied from sluggish to moderate, while zinc pigments appeared generally active. Demand for scarce materials like cadmium colors and titanium dioxide continued to outstrip production. Despite the substantial price advance in cadmium selenide lithopones and arrival on the market of a competitive product (cadmium mercury lithopones) the former material is still in very tight supply.

All production facilities for titanium dioxide are working at capacity, as manufacturers endeavor to keep pace with consumer needs. Thus, sufficient material is being marketed, although occasionally delay in shipment becomes necessary.

Business in plasticizers had declined somewhat last week. In some quarters it was felt that the cutback in automobile production might be effecting the market adversely. If this is the case, business should be picking up soon, inasmuch as manufacture is on the upswing again. Also, spring demand from paint manufacturers should have a salutary effect on the market.

Natural resin dealers have absorbed a ¼ cent cost increase in the form of a 10 percent upping of freight rates between the far east and New York, but with demand rather low at present, this can be expected to stabilize the market rather than stimulate price increases. Renewed interest in shellac futures was noted last week but the overall tone of the market continued quiet. In natural resins business was generally confined to immediate needs.

With the rumor circulating that France will soon be offering sizeable quantities of casein, a further slip in Argentine prices is expected by some dealers. Last week the material dropped ½ cent to 26 cents to 27 cents per pound, ex dock New York. American consumers are showing little interest right now, due to dissatisfaction with Argentine prices and availability of cheaper substitutes such as soya protein.

Price Trends

Advanced
None

Reduced
Casein, imp., Arg., ½c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 12, 1955
100.15	100.15	100.13	97.13

For Current Prices see Page 9

Prime Pigments

Carbon Black—Production of carbon black in January was 160,040,000 pounds, an increase of 3 percent over production in December. Shipments of furnace black increased by about 9,000,000 pounds while contact black shipments increased by approximately 2.5 million pounds.

The following figures, in thousands of pounds, indicate production, shipments, stocks and exports of carbon black for January, 1955, with figures for December, 1954, and January, 1954, reported for comparison.

Production

	Furnace	Contact	Total
January, 1956	127,818	32,222	160,040
December, 1955	123,107	32,182	155,289
January, 1955	104,695	29,693	134,388

Shipments

January, 1956	124,279	33,256	157,535
December, 1955	113,466	30,857	144,323
January, 1955	105,346	43,403	148,749

Stocks

January, 1956	136,287	95,294	231,581
December, 1955	132,748	96,328	229,076
January, 1955	128,106	172,647	300,753

Exports

January, 1956	*	*	*
December, 1955	22,831	15,071	37,902
January, 1955	18,317	15,973	34,290

Lead Pigments—Last week's trading was described variously as sluggish to moderate. Sales by one producer were reported somewhat lower, while in another case spring buying had already commenced. Apparently then, this is a transitional period, showing mixed buying policies on the part of consumers. Sales are expected to be uniformly high within the next couple of weeks. Prices last week were steady and supplies adequate.

Titanium Dioxide—All production facilities are working at capacity right now, as manufacturers attempt to keep pace with demand in this market. As a result, sufficient material is available for consumers, although some delay in shipment is occasionally necessary. Since price advances were posted early in January, no changes have been reported for this material.

Zinc Pigments—Sales were at seasonal levels last week, with many consumers inititating their spring buying. Prices of both the metal and the pigments were steady. Pigment supplies were reported in good balance with present demand.

Lacquer Materials

Dioctyl Phthalate — Business has been somewhat slower during the last month, possibly reflecting the cutback in auto production. Last year at this time, with auto production booming, plasticizer business was hitting a good clip. Spring demand from paint manufacturers together with an upturn of activity in the auto industry should stimulate sales of plasticizers in the coming weeks.

Tricresyl Phosphate — Along with other plasticizers this material has been slowing down recently. It is felt in the industry that this is a temporary adjustment, caused by a reduction in automobile production and other slowdowns in the economy. Producers are optimistic about sales during the Spring season, particularly in view of large requirements anticipated from the paint industry.

Fillers and Inerts

Barytes—Sales totals and prices of this material have been steady through recent months, with supplies ample for consumer needs. Freight advances put into effect last week will raise prices as much as $1 per ton for shipments to consumers, while mine prices, of course will be unaffected.

Blanc Fixe—The last change reported for this filler was a $10 advance posted September 1955. Since then the material has been steady and in normal demand, with sales holding at an even keel. Supplies have been sufficient.

China Clay—No price changes have been reported for this material recently. Dealers report that sales have been moving evenly with adequate supplies of both domestic and foreign materials available.

Fuller's Earth—Prices continue at levels reported previously. Prices to final destination will be a little higher due to the recent upping of freight prices, but mine prices, as quoted in OPD, will be unaffected.

Mica—A ½ cent advance for wet grade and extra fine mica was made effective last Friday by a major manufacturer. As of press time, word had not been received from other producers concerning comparable advances. Increases in the

cost of labor and materials were the factors behind the price advance.

Natural Resins

Gum—The price paid by American dealers for gum has advanced about ¼c. per pound in the form of a 10 percent freight increase between the Far East and New York. But this increase is not of sufficient magnitude to effect prices paid by consumers. Business has continued quiet and generally confined to immediate needs. Ample supplies have been available to meet current demand.

Shellac—Renewed interest is being manifested in futures but the overall tone of the shellac market continues quiet. The 10 percent freight increase recently posted has brought dealers' costs up about ¼c. per pound without, at present, affecting final prices to consumers. In view of the slackness noted in demand, this cost increase may be regarded as a stabilizing influence on the market.

Miscellaneous

Casein—A rumor now circulating contradicts a previous report that European production had been damaged by severe winter weather. It is believed now in several quarters, on the basis of at least one offer from France at a quotation ½c. below the Argentine price, that Europe's spring produce may be fairly sizable. Meanwhile, demand in America is exceedingly low, due to dissatisfaction with Argentine prices and availability of substitute materials. Last week's quotation on Argentine casein was 26-27c. per pound, ½c. below the previous price.

Dried Blood, Soluble—Demand at the Chicago market was reported very heavy. One producer found that consumer requirements during the last week were exceeding current production. Prices continue at previous levels of 13-15c. per pound in carlots and 15½-19½c. per pound in less carlots.

Naval Stores

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Mar. 2	Mon. Mar. 5	Tues. Mar. 6	Wed. Mar. 7	Thur. Mar. 8
Drums—					
K	...	$8.30	...	...	...
M	$8.30	...	...	$8.30	$8.40
N	...	...	...	8.30	...
WG	...	8.65	...	...	8.60
WW	8.65	8.69§	...	8.63§	8.62§
Bags—					
K	...	...	...	...	8.30
WG	8.65	...	...	...	8.60
WW	...	...	...	8.65	8.65

Tankcars (for week ended March 2)—
WG, $8.25; M, $8.08§; K or better, $8.08§

Sales, USDA

1,428* 839* 160* 524* 821*

New York
(per 100 lbs., c.l., Friday)
B through N, $9.55; WG, $9.60; WW, $9.10

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.5625	.56	...	...	...
Sales	4,000¶	4,000¶	...	...	...

New York, Friday, per gal. 7 lbs., tankcars, 63½c., l.c.l. 75c.

*Drums equivalent. ¶Gallons. §Average price.

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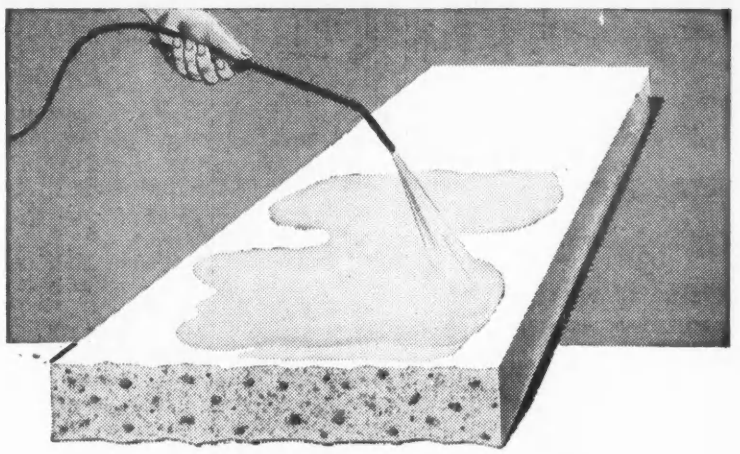

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Polyethylene Film Offered Building Industry by Olin

Olin Mathieson Chemical Corporation for the first time is offering polyethylene film to the building and construction industry.

Expecting that the bulding trade will develop into a major market, the company is setting up distributors in the northeast, middle west, middle Atlantic states, and the south. It also will launch a major sales promotion effort aimed at acquainting the trade with its plastic film.

Called "Olin Polyethylene," the film is sold by the corporation's film division. The division also distributes "Olin Cellophane."

Olin Mathieson is offering its polyethylene in two, four and six mil gauges, and in widths up to sixteen and a half feet.

"The excellent results obtained by builders in using polyethylene as a moisture and vapor barrier encourage us to expect more and more of them to use polyethylene. The steady rise in construction in the past ten years and the long-range outlook for even more home building when the World War II and postwar crop of babies grow to maturity gives us reason to look forward to an ever-growing market for polyethylene," Arthur T. Safford, jr., sales manager, pointed out.

Hercules Naval Stores Unit Fills Four Managerial Posts

The naval stores department of Hercules Powder Company, Wilmington, Del., has filled four managerial posts. They are:

L. E. Anderson, sales manager, oxychemicals division.

Richard J. Both, manager, Chicago district office.

P. J. Reno, sales manager, agricultural chemicals division.

Allen C. Gunter, manager, Dallas, Tex., district office.

Mr. Anderson, sales manager, oxychemicals division, for the past four years has been manager of the department's Chicago District Office. Mr. Both, manager, Chicago district office, has been sales manager of the Naval stores department's agricultural chemicals division.

Mr. Reno, sales manager, agricultural chemicals, has been manager of naval stores' Dallas office for the past six years. Mr. Gunter, manager, Dallas district office, joined Hercules in 1952, as a technical representative at the Dallas office.

Captive Operation

—*Continued from page 5*

whether its interests are best served by advancing into the consumer product fields with all their elaborate merchandising and marketing problems or whether it might not be preferable to remain a supplier to other industries, according to the speaker.

Francis S. Williams, president and director of Chemical Fund, Inc., discussed the investment banker's appraisal of growth prospects of chemical stocks. Among the important factors involved in such appraisals, according to Mr. Williams, are the sales and earnings of the chemical companies, their price/earnings ratio, their financial condition, and their investment in plants, equipment, and research.

Mr. Williams cites many of the important new chemicals which recently have been made available as evidence of the wide diversification and rapid growth of the industry.

Aspect Discussed by Gillis

One aspect of this expansion was discussed by John L. Gillis, vice-president of Monsanto Chemical Company, who finds that it has involved a noticeable movement of the chemical manufacturing industry toward the consumer.

Mr. Gillis points out that the motivation for this trend lies, in part, in the efforts of large and medium-sized chemical companies to "keep up with the times by continually upgrading their products to higher and higher levels in order to maintain profit margins and growth. As products are upgraded further and further, the point is inevitably reached where they need no further processing for final consumption," according to Mr. Gillis.

A personal "do-it-yourself" program to encourage more young people to enter into science or science-teaching careers was urged by John R. Hoover, president of B. F. Goodrich Chemical Company and chairman of the board of the Manufacturing Chemists' Association, in an address to the CCDA members at luncheon.

Mr. Hoover points out that the young "builders of tomorrow" must be preparing today for the adventure ahead. He urges that each scientist draw on his own experience to help tell the youth of today that there is no field in modern times that will offer a greater opportunity nor a more exciting challenge to their imagination and effort than the business of taming nature's molecules to meet the ever-growing needs and wants of man.

Other officers elected by the CCDA members include:—Treasurer, W. J. Riley, manager, market development, Westvaco mineral products division of Food Machinery & Chemical Corporation, and executive secretary G. A. Harrington, manager, market research, Indoil Chemical Company.

In addition, the following were elected as directors:—Dr. James R. Dudley, director of research and development, Richardson Company, and J. M. Rogers, sales manager, Fluorochemical Division, Minnesota Mining & Manufacturing Company.

Donald K. Ballman, general sales manager for Dow Chemical Company, received the 1956 honor award of the association at the annual banquet. Dr. Robert L. Bateman, CCDA president, presented the award.

Infrared Spectroscopy Topic For MIT Summer Session

An intensive program in infrared spectroscopy, to be given from August 6 to August 17 during the 1956 summer session at the Massachusetts Institute of Technology, has been announced by Prof. Ernest H. Huntress, director of the MIT summer session.

The program, to be offered jointly by the institute's spectroscopy laboratory and department of chemistry, according to Prof. Huntress "is designed for those who wish an introduction to infrared instrumentation and laboratory methods and for those interested in the use of infrared spectra in the solution of chemical problems."

It will consist of two integrated one-week courses, one on the technique of infrared spectroscopy and the other on the applications of infrared spectroscopy. Both are to be under the direction of Dr. Richard C. Lord, director of the MIT spectroscopy laboratory, assisted by Dr. Foil A. Miller of the spectroscopy laboratory at the Mellon Institute of Industrial Research, Pittsburgh, Pa., and Prof. E. R. Lippincott of the University of Maryland, College Park, Md.

ACS New York

—*Continued from page 7*

discussion on chemical sales will be held simultaneously during the all-day meeting.

Gene Flack, sales counsel and director of advertising of Sunshine Biscuits, Inc., Long Island City, N. Y., will speak at a luncheon of the section's chemical marketing and economics group in the Earle hotel.

Also on the group's program is a morning session in Vanderbilt Hall Auditorium on the theme "Planning Today for Tomorrow's Sales," to be headed by Carl W. Peterson of E. I. du Pont de Nemours & Co., Wilmington, Del., and a panel discussion in the afternoon on "Staff Departments as Aids to Sales." Panel moderator will be Lee A. Keane, director of sales of the U. S. Industrial Chemicals Company, New York.

"A New Method for Preparing Sulfanilamides" will be described in a paper by W. M. McLamore, E. Gelblum and A. Bavley of Chas. Pfizer & Co., Brooklyn, N. Y., in an afternoon session of the organic chemistry group.

Changes in Cancerous Lab Animals

Two papers discussing chemical changes in cancerous laboratory animals will be presented in the afternoon session on biochemistry in the Waverly Building. The authors are Prof. L. R. Cerecedo, H. Hochstrasser and E. Bresnick of Fordham University.

"Analysis of Atmospheric Odorants" will be the subject of a paper by Dr. Amos Turk of the City College of New York at the afternoon session of the analytical chemistry group in the Main Building.

There will also be sessions on physical and inorganic chemistry.

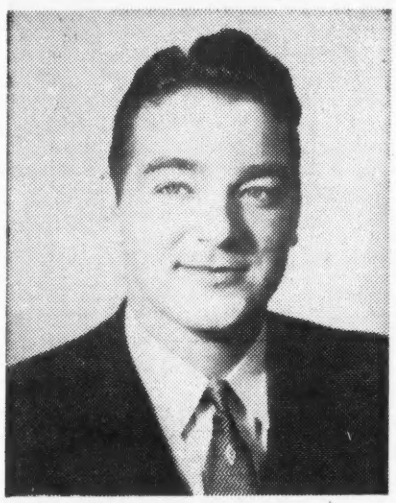
Salk Vaccine

—*Continued from page 4*

tions to all who need it. Accurate predictions of future supplies are impossible.

"The vaccine available is being distributed equitably among the states, without delay, on the basis of each state's population of children under 15 and pregnant women. The public generally has cooperated in following recommended priorities for the age groups most succeptible to polio, and should continue to do so.

"I am grateful to the manufacturers for their cooperation in these conferences and in the effort to provide maximum protection to the people against polio as soon as possible."



SALES PROMOTION MANAGER: Roy M. Barnes, jr., elevated to the newly-created post of sales promotion manager in the dyes and chemicals division of E. I. duPont de Nemours & Co., Wilmington, Del.

Imports at U. S. Ports

—Continued from page 53

COPRA—800 tons, Cargill Inc, Cebu
450 tons, Cargill Inc, Jolo
500 tons, Pacific Vegetable Oil Corp, Legaspi
CAKE—25 tons, Balfour Guthrie, Cebu
45 tons, Atkins Kroll & Co, Cebu
DEXTRIN—23 bgs, Dilco Products, Amsterdam
EARTH COLORS—450 bgs, Castelazo & Associates, Bremen
FISHMEAL—2,203 bgs, Wessel Duval & Co, Callao
1,018 bgs, Wessel Duval & Co, Chimbote
1,104 bgs, Marine & Animal By Products Corp, Chimbote
GRAPHITE—200 bgs, Pacific Graphite Co, Colombo
KELPMEAL—400 bgs, N K M Importing Co, Bergen
LAURIC ACID—1,000 bgs, Golwynne Chemical Corp, Hull
MARJORAM LEAVES—96 bgs, Hismoco American Co, Marseille
PAPRIKA—250 bgs, B C Ireland, Naples
50 bgs, McClintock Stern Co, Naples
25 bgs, West Coast Spice Co, Naples
75 bgs, McClintock Stern Co, Marseille
200 bgs, B C Ireland, Marseille
PETROLEUM, CRUDE—208,630 bbls, Tidewater Assoc Oil Co, Las Piedras
164,866 bbls, Tidewater Assoc Oil Co, Sungai Pakning
211,757 bbls, California Transport Corp, Sungai Pakning
SODIUM BICARBONATE—200 bgs, C M C Chemicals, Manchester
999 bgs, C M C Chemicals, Liverpool
BICHROMATE—60 dms, Durban
TRICHLOROETHYLENE—100 dms, C M C Chemicals, Manchester
UREA—5,005 bgs, Atkins Kroll & Co, Antwerp
500 bgs, C M C Chemicals, Liverpool
20,000 bgs, Wilson & Geo Meyer & Co, Heroya
SYNTHETIC—299 bgs, C M C Chemicals, Manchester

Pittsburgh Plate Fills Branch Managers' Posts

Pittsburgh Plate Glass Company, Pittsburgh, Pa., has announced the appointment of Sterling Basil as manager of its Fort Wayne, Indiana, distributing branch. Mr. Basil succeeds Charles H. Packer, who has retired after 44 years of service with the company.

Prior to his appointment, Mr. Basil had served as assistant manager of Pittsburgh Plate's Cincinnati, Ohio, distributing branch during the past two years. He has been associated with the film since 1939 when he joined the Columbus, Ohio, distributing branch as a sales clerk. He later served in supervisory sales positions at both Columbus and Cincinnati.

Appointment of Donald B. Berg as assistant manager succeeding Mr. Basil at Cincinnati also has been announced. Mr. Berg had served as glass manager for Pittsburgh Plate's Des Moines, Iowa, distributing branch since 1952.

Model Laminating Laboratory Installed at Monsanto Plant

A model decorative and industrial laminating laboratory is being installed at Monsanto Chemical Company's application research facilities at Springfield, Mass.

According to Monsanto the new laboratory is part of an increased effort to perfect and develop uses for the company's melamine and phenolic laminating resins. An experimental laboratory treater will be the nucleus of the new equipment which is expected to be in operation by late summer.

Stragnell-Lee, Inc., Formed

The pharmaceutical firm of Stragnell-Lee, Inc., Los Angeles, has been established by Dr. Gregory Stragnell and Raymond Lee. Dr. Stragnell organized Schering Corporation in 1929, and during World War II was in charge of Heyden Chemical Corporation's penicillin plant. Mr. Lee is president of Lee, Ltd., Beverly Hills, Calif.

Int'l Naval Stores Will Move

International Naval Stores Corporation on April 1 will transfer its sales office to the Savannah Bank Building, P. O. Box 1281, Savannah, Ga. J. M. Ernest Schuster has been named sales manager of the company as of that date.

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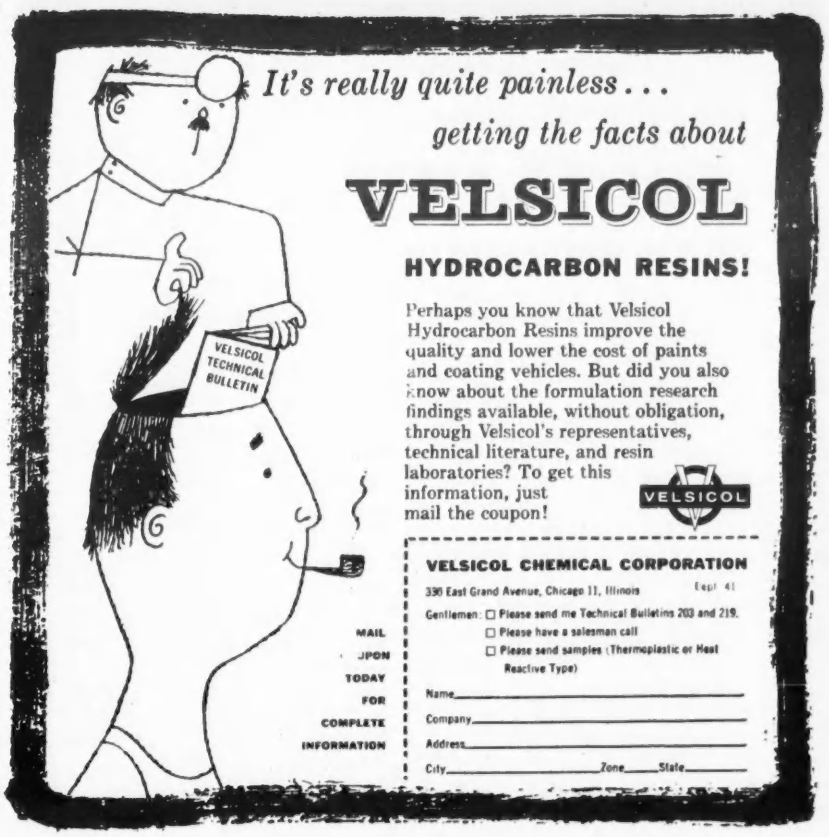
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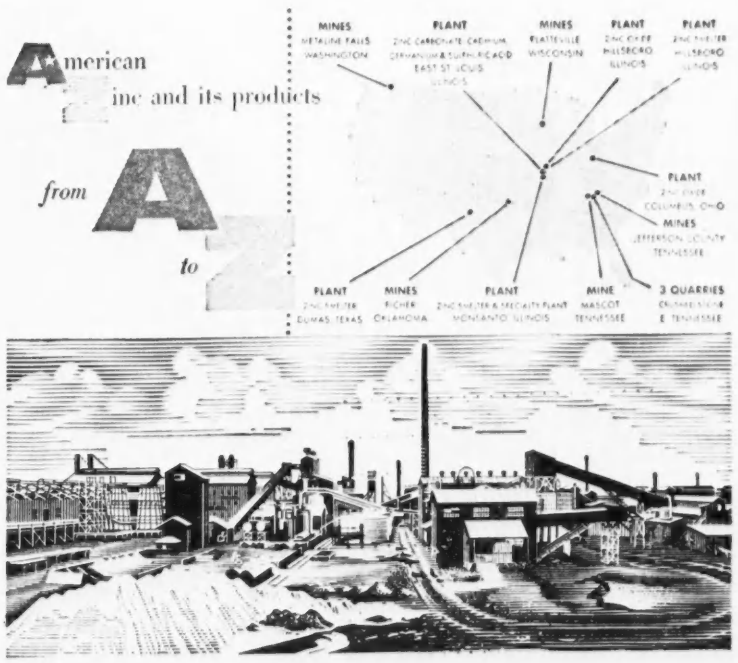

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Oils Fats and Waxes

Drastic price advances in soybean oil featured the oils and fats market last week. Active export interest raised prices sharply to season's highs and despite some reaction later, the market closed at high levels. Cottonseed oil also was boosted sharply for both crude and cash refined oil. Corn and peanut were stronger and advanced fractionally.

Trading in edible grades was keen chiefly for export, and the market also reflected additional business pending to Spain and other European countries.

Tallow and greases closed firmer as a result of improved export business late in the week. Export business was active on the Pacific coast. Prices were steadier.

Crude coconut oil was firmer and fractionally higher. Copra also was stronger.

Linseed oil closed unchanged after advancing fractionally with fluctuating flaxseed market. Tung oil was easier, reflecting government sales at lower levels. Oiticica oil remained steady and unchanged. Palm oil was stronger on spot and for shipment due to higher ocean freight rates. Rapeseed oil also was advanced reflecting the increased cost of edible oils.

Soybean meal was weaker and declined $1.50 per ton. Linseed meal was unsettled, also off $1.50 per ton. Cottonseed meal was quiet and declined $1 per ton.

Consuming demand for vegetable waxes continued restricted to actual needs. Most carnauba grades were in liberal supply on spot and with business slow, firm bids could have shaded quotations for sizable lots. Scarcity of candelilla and Japan waxes on spot and for replacements kept quotations strong. Crude beeswax was quiet, but firm for replacement. This was reflected in refined grades.

Price Trends

Advanced

Copra, $2.50 per ton.
Oil, coconut, crude, ½c. per lb.
Corn, crude, ¼c. per lb.
refd., ½c. per lb.
Cottonseed, crude, ⅜c. per lb.
refd., ⅜c. per lb.
Palm, ¼c. per lb.
Peanut, crude, ⅜c. per lb.
refd., ⅜c. per lb.
Rapeseed, ¼c. per lb.
Soybean, crude, ⅜c. per lb.
refd., ⅜c. per lb.

Reduced

Cocoa butter, 1c. per lb.
Cottonseed meal, $1 per ton.
Linseed meal, $1.50 per ton.
Oil, tung, ¼c. per lb.
Soybean meal, $1.50 per ton.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Mar. 11, 1955
98.08	99.01	100.40	111.42

For Current Prices see Page 9

Vegetable Oils

Castor—Buying interest was quite active. Market was steady and quotably unchanged. No. 1 Brazilian was quoted at 15½c. per pound, tankcars, New York, prompt delivery.

Coconut—Crude was higher at 11¼c. per pound, tankcars, f.o.b. Pacific coast, prompt shipment and 12⅜c., New York basis.

Corn—Prices were stronger and up ¼c. Crude was sold at 15½c. per pound tankcars, f.o.b. mills, prompt shipment. Refined oil was higher at 19c. per pound, tankcars, New York basis.

Cottonseed—Active demand resulted in futures reaching new season highs, which were not sustained as a result liberal liquidation and professional selling. Market closed stronger and regained losses. Cash oil was scarce and higher at 18¾c. per pound, tankcars, New York, prompt delivery. Open interest also reached a new high totaling 5,259 contracts. Tenders on March contracts increased to 240 and readily taken.

Crude cottonseed oil was in active demand for export, and scored net gains of ⅜c. per pound. Sales in the Valley took place at 14¾c. and later 14½c. per pound, tankcars, f.o.b. mills. In the southeast market was nominal at 14¾c. and ranged from 14⅜c., Waco to 14⅛c., Lubbock, Texas.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, March 9, follow:—

	Sales	Cents per pound High	Low	Close
Mar...	110	17.18	16.64	16.80@16.83
May..	532	17.20	16.71	16.87@16.88
July..	746	17.00	16.54	16.82S
Sept..	255	16.16	15.64	16.00S
Oct...	41	15.65	15.35	15.57@15.62
Dec...	174	15.15	14.85	15.15S

Total sales, 1,838 contracts.

Memphis.—Crude cottonseed oil was nominal 14½c. per pound, tankcars, f.o.b. mills. Cottonseed meal quoted $51 per ton, Memphis; hulls, $4 per ton bulk and $8 sacked.

Linseed—Prices were advanced 3/10c. per pound, but was not sustained when flaxseed dropped 5c. per bushel. Raw oil closed unchanged at 15.6c. per pound, tankcars, Minneapolis, March-August delivery. Buying interest continued inactive. Deliveries against contracts continued in active request.

Flaxseed—Prices irregular, and declined 5c. per bushel.

Minneapolis.—Cash flaxseed bids were down 5c. a bushel, trading at $3.65, basis Minneapolis, for both spot and to-arrive. Export interest early in the week raised prices as high as $3.75, but upon satisfaction of immediate export demand bids quickly dropped to a level crushers were willing to support. Even at the lower level, one or two crushers were out of the market entirely. The market situation was tense as crushers carefully weighed estimated supplies against estimated needs. Producer offerings of the limited remaining supplies were extremely light, only 6 cars being received in the spot cash market. To-arrive bookings totaled 47 cars and 57,865 bushels in trucklots, diminishing sharply as prices dropped. Arrivals of flaxseed for all accounts amounted to 294 cars, compared with 57 cars in the same week last year. Shipments from Minneapolis totaled 63 cars, against 33 cars last year.

Receipts and shipments of flaxseed, in bushels, were as follows:—

	Receipts 1955-56	Shipments 1955-56	1954-55
Past week..	514,500	110,250	57,750
Since Sept. 1	20,945,750	3,713,500	4,195,000

Cottonseed Crush: Jan.

Cottonseed received and crushed and production of cottonseed products during January and December, as compiled by Bureau of the Census, follows:—

	January	December
Cottonseed	Tons	
Receipts	169,068	569,890
Crushed	691,528	672,452
Stocks	1,898,199	2,420,639
Crude Oil	Pounds	
Produced ..	231,041,000	226,931,000
Stocks	75,428,000	69,601,000
Refined Oil	Pounds	
Produced ...	174,915,000	185,720,000
Stocks	[1]416,904,000	[1]378,216,000
Cake and Meal	Tons	
Produced ...	320,731	317,153
Stocks	191,461	163,049
Hulls	Tons	
Produced ...	153,802	150,238
Stocks	136,324	120,204

[1] Includes 91,000,000 pounds of refined cottonseed oil owned by Commodity Credit Corporation. This figure, as well as the comparable December 31 total of 101,000,000 pounds, revised, includes quantities sold for export but not lifted but excludes quantities sold for export and being processed. As of January 31, CCC reported no quantities of refined cottonseed oil, being removed from inventory and put in an "in-transit" position to other storage.

Oils. Fats and Waxes

Oiticica — This market remained steady and unchanged. Liquid was maintained at 15c. per pound, tankcars, New York, prompt and forward delivery. Drums were quoted at 16¼c. to 16¾c. per pound, depending upon quantity.

Olive—This market remained unchanged and steady. Light sales were reported ranging from $3.65 to $3.75 per gallon, drums, spot, duty paid depending upon quantity. Buying interest was restricted as the trade awaited the arrival of oil from Spain. The Olive Oil Association announced that the Spanish government had agreed to allow shipments to be made on contracts for which export licenses had been issued.

Palm—Prices were higher as a result of increased ocean freight rates. Drums were advanced to 13¾c. to 14c. per pound, spot as to quantity. Tankcars were higher at 11.65c., New York prompt shipment.

Peanut—Crude was firmer, with sales at 17⅜c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined was higher at 21⅛c. per pound, tankcars, New York, prompt.

Rapeseed — Refined was firmer, with edible oils. Tankcars were raised to 16¼c. per pound, tankcars, New York, prompt delivery.

Soybean—Active demand for domestic and export boosted the market sharply into new highs for the season. Offers were scarce, especially for March, and crude sold up to 15c. tankcars, Decatur for this delivery. Market eased at the close and March was quoted at nominally at 14³⁄₄... while April dropped to 14½c. and 14⅜c. May-June, same basis. Refined salad oil was higher and held at 17¾c. per pound, tankcars, New York, prompt.

Soybean Crush: Jan.

Soybeans received and crushed and production of soybean oil and meal during January and December, as compiled by the Bureau of Census, follows:—

Soybeans

	January	December
	Tons	
Receipts	493.344	518.611
Crushed	733.355	716.058
Stocks	2.213.499	2.453.510

Refined Oil

	Pounds	
Produced	239.846.000	232.155.000
Stocks	81.682.000	79.686.000

Crude Oil

	Pounds	
Produced	270.046.000	261.550.000
Stocks	66.295.000	57.996.000

Cake and Meal

	Tons	
Produced	567.037	548.659
Stocks	99.924	66.389

Soybean Oil Futures

Sales and prices of crude soybean oil futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, March 9, follow:—

	Sales	High	Low	Close
		Cents per pound		
Mar.	2	14.93	14.93	14.63@14.80
May	18	14.43	14.05	14.29@14.36
July	19	13.85	13.52	13.73@13.82
Sept	1	13.00	13.00	12.75@12.85

Total sales, 40 contracts.

Tung — Sales of government stocks at lower levels, unsettled the market and prices were off fractionally. CCC sold 32 tankcars at prices ranging from 23½c. to 24.15c. per pound, tankcars, basis Gulfport, Miss., averaging 23¾c. per pound, which averaged about 1½c. less than sales last month. Bids for 63 tankcars were received. In the current market prices were ¼c. lower. Light trading was reported at 25¾c. per pound, tankcars, New York, prompt

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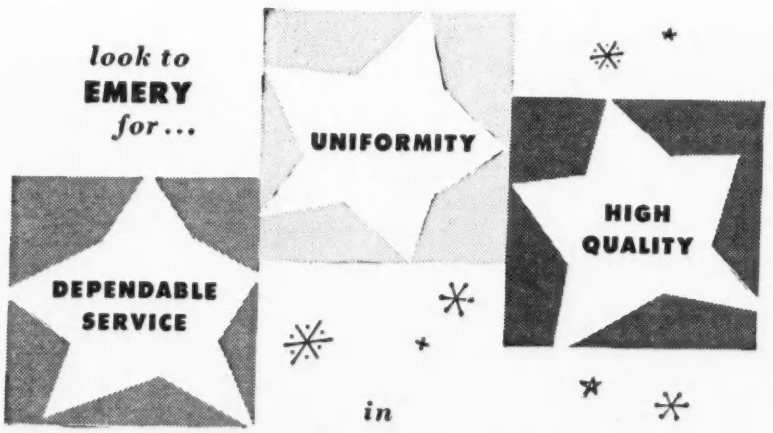

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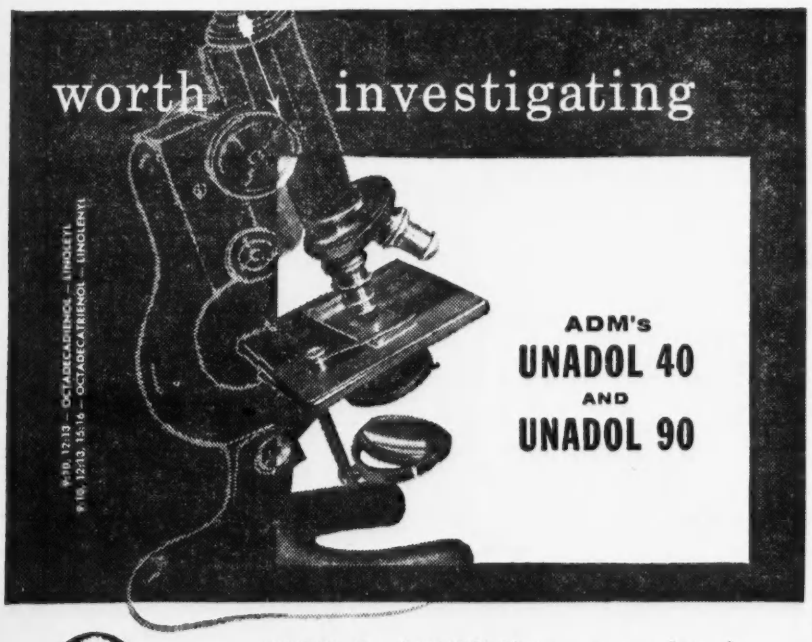

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Oils, Fats, Waxes

shipment. Domestic oil also was easier at 25¾c., f.o.b. mills.

Miscellaneous

Castor Beans—Primary market remained firm. Shipments from Brazil were nominal at $125 per ton, f.o.b. ports.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:—

	Pounds	
	Beans	Oil
Last week	.....	1,216,000
Previous week	168,800	.....
Corresponding week, 1954	2,052,000	200,000
Total this year	12,606,900	17,219,000
Corresponding period, 1954	25,241,000	14,928,000

Cocoa Butter—Prices were weak and declined to 47c. to 51c. per pound, spot, as to quantity.

Copra — Market was stronger. Shipments were held at $152.50 per ton, c.i.f. Pacific coast.

Fats and Greases

Greases—Light trading was reported for prompt delivery for domestic delivery, while export business was slow. Prices were off slightly. Yellow grease was quoted at 6⅞c. to 7c. per pound, tankcars, delivered, as to quantity. Choice white was nominal at 7⅜c. and not all hog at 7⅛c. same basis.

Lard—Export interest was quite active, the market holding steady. Cash lard was quoted at 11¾c. per pound, drums, Chicago.

Oleo Oil—Business was reported spotty. Extra was unchanged at 11c. to 11½c. per pound, drums, and oleo stearine, 11c. to 11½c., barrels, spot.

Tallow — Domestic trading was fairly active and the market closed steady at unchanged quotations. Bleachable fancy was offered at 7⅜c. per pound, tankcars, delivered, with sales to soapers as ⅛c. less. Export business was active on the Pacific coast and slow in the East. Extra was quoted at 7⅛c.; special, 7c. and No. 1, 6⅞c., same basis. Guaranteed fancy was held at 9c. to 9⅛c. per pound, drums, f.a.s. and extra, 8¾c., April shipment.

Fish Oils

Refined Fish—Fair volume of business was noted for immediate needs. Light pressed was offered at 11c. per pound, tankcars, New York basis. Trading in crude menhaden oil was inactive. Old crop was nominal at 8¾c. per pound, tankcars, works and new crop if and when made, 8c., same basis.

Cake and Meal

Cottonseed Meal — This market was unsettled with demand slow. Old process, 41 percent, was offered at $51 per ton, sacked Memphis; $50.50 Mississippi Valley points; $54.50 Alabama; $57 Georgia and South Carolina mills March shipment, and 41 percent solvent at $46 basis lower Mississippi Valley points and $48 Memphis for March shipment.

Linseed Meal—Prices weak and lower. Demand inactive.

Minneapolis.—There was virtually no demand for linseed meal and heavy supplies weighed on the market, depressing prices $1.50 per ton. Shipping directions also lagged as formula feed manufacturers held orders to a minimum. Extracted linseed meal, 36 percent protein, ranged from $46 to $47 a ton, bulk, in carlots, f.o.b., Minneapolis, for March forward. Old process expeller meal was at $53.50 for March, $55.50 for April-June.

Shipments of linseed meal, in pounds, were as follows:—

	1955-56	1954-55
Past week	12,480,000	13,320,000
Since Sept. 1	449,170,000	388,860,000

Soybean Meal—Market weakened considerably last week in face of continued strong prices for oil and beans. Meal for immediate shipment was pressing on the market and it was difficult to find buying interest. Forty-four percent unrestricted was quoted at $47 March, $48 April, $49 May, $49.50 June, $51.50 July-September, all bulk basis Decatur, and $51.50 f.o.b. Mississippi Valley points for March shipment.

Argentine Sunflower, Peanut Crops Due for Sharp Rise

Argentine sunflower and peanut crops are expected to be up sharply in 1955-56, according to the Foreign Agricultural Service.

Trade estimates place sunflower output at 800,000 short tons from 3,706,500 acres and peanut production at about 254,000 tons, unshelled basis, from 691,880 acres.

A sunflower seed crop of this volume would indicate an increase of 180 percent from 1954-55 when 311,730 tons were harvested from 1,001,250 acres (1,381,289 acres planted). However, this would still be considerably below the output of the early postwar period when production averaged about a million tons annually.

Peanut production would be up some 95 percent from the 130,070 tons harvested from 367,685 acres (387,947 acres planted) last year.

The expected sharp increases are the result of the major increases in guaranteed prices to producers for 1955-56 oilseed crops. For sunflower seed the guaranteed price is 130 pesos per 100 kilograms compared with 70 pesos for the 1954-55 crop and for peanuts 180 pesos against 100 a year ago.

Flaxseed, Linseed Oil Export Off Sharply in Past Year

United States exports of flaxseed and linseed oil in 1955 were down sharply from 1954, when the volume marketed abroad reached an all-time peak reflecting large sales at low prices from Commodity Credit Corporation stocks, according to the Foreign Agricultural Service.

Flaxseed exports in 1955 at 4,706,215 bushels were the highest in almost fifty years with the single exception of 1954. And linseed oil exports at 73,606 tons were, with the exception of 1954, the highest since the war years of 1943 and 1944. On a flaxseed equivalent basis, exports of seed and oil in 1955 totaled 12 million bushels compared with almost 32 million in 1954 and only 4.6 million in 1953.

Europe continued to be the major market for United States flaxseed, accounting for 92 percent of the total. The bulk of the shipments to Europe went to the Netherlands, Belgium - Luxembourg, France and Norway.

The major portion of the linseed oil—96 percent of the total—also went to Europe with 56 percent of the total destined for the Netherlands and 36 percent for the United Kingdom.

Fatty Acid January Output Falls Below December Level

Production of fatty acids in January was 37.8 million pounds, approximately 1 million pounds less than the previous month's total of 38.8 million pounds, but 4.1 million pounds above the January, 1955, figure of 33.7 million pounds, according to the Association of American Soap & Glycerine Producers.

Total disposition was 39.3 million pounds, about 1.3 million pounds above December's level. This included some 2.2 million pounds of sales within the industry, so that actual disposition outside the industry is overstated to this extent.

Stocks, including work-in-process, increased about 2.6 million pounds to a level of 45.4 million pounds.

USDA Lists Salable Items

Department of Agriculture has announced that its list of commodities available for purchase during March will again include non-fat dry mild solids, tung oil, peanuts, soybeans, flaxseed, gum rosin, and gum turpentine. The department said the only major change from the February list was the removal of cottonseed oil and linseed oil because of depleted stocks.

City Chemical Picks Annunziato

Gerald H. Annunziato has joined the sales department of City Chemical Corporation, New York. His sales territory will be the metropolitan area.

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HAMMER MILLS—Mikro 4TH, Jeffrey Junior 15x8 (10 HP), 20x20 (30 HP), Gruendler Model 2 W. feed screws.

SCREENS ROTEX — 40x120 Single, Tyler Hummer, 3x5 (double), 3x10 double.

PEBBLE MILLS—18x18, 24x24, 24x36, 4x5 porcelain lined, 6x9 Buhrstone, 24x18 Rubber.

BALL MILLS—Hardinge 6'x22", 7'x48" Pebble.

CRUSHERS—JAW—7x9, 20x4 Farrel, 11x26 Champion, 14x28 Acme.

CRUSHERS—ROLL—16x10, 30x16 Chambers, 42x16 Allis Chalmers "B".

MIXERS—Stokes 13 gal. Lancaster EBG & EAG W. skip hoist.

ROTARY DRYERS—12"x22', 39"x21', 44"x 25', 5'x40', 6'x30'.

AUTOCLAVE—Stainless 1 Gal. 1000 psi W/ agitator & 100 psi jacket.

VACUUM PUMPS—Nash Hytor MD 673, 623, 1253, H6-H7.

FORK LIFT—Hyster 15000# cap, pneumatics, power steering 12' lift.

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ECH SPECIALS

Baker Perkins SS Lab Mixer, Sigma arms 1 HP
Day 5 gal. S S jktd. vac. Mixer, sigma arms
Hercules 200 sq. ft. S S Precoat Leaf Filter.
Gen. American 42" x 120' twin drum dryer
Sharples Super Centrifuge 316 SS 2 HP exp.
Tolhurst 48" S S Centrifuge, exp. proof mtr.
Baker Perkins 100 gal. S S Mixer, 20 HP exp.
Baker Perkins Size 30, Type RWUEM, Sigma Arms Jktd. Mixer SS, 150 HP., motor & drive.

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Devine #12 & #23 Vac. Shelf Dryers.
Stokes 2'x6' Rotary Vac. Dryer.
2—Allbr. Nell 4x9 Atmos Drum Dryers.
1—Buffalo Vac. Drum Dryer, 24"x20"

CENTRIFUGALS AND CENTRIFUGES

4—Tolhurst 40" Suspended Type.
8—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel, Copper, Stainless & Rubber.
6—Sharples No. 5A Stainless & #6.
2—De Laval Multi Clarifiers 300 & 301.

FILTERS

#2 Sweetland Filter 12 Stainless covered leaves
1—Vallez Filter #49 with 41 Stainless covered 4½" dia. leaves.
Gen. Amer. 2'x1' Rotary Vac. Filter.
Sperry and Shriver 6" to 36" iron & wood.
Sweetland & Oliver Filters.

KETTLES AND TANKS

Pfaudler 500 gal. Glass Lined Jack Reactor.
Pfaudler 250 gal. Glass Lined Jack. Kettle.
Dopp 350 gal. Agit. Jack CI Vac Kettle.
2—Impreg. Units 30" & 36" dia. complete.
500 & 1,000 gal. closed Jack. Steel Kettles.
2300 gal. vert. agit. Jack. Steel Kettle.
1—250 gal. Lead lined Kettle.
Stainless, alum., copper, Glass lined, lead lined and steel kettles and tanks.

PULVERIZERS AND MILLS

2—Mikro Pulverizers #2TH & #2SI.
Abbe 37"x30" chrome-mang. Ball Mill.
Patterson 30"x42", 4'x5' & 6'x4'.
Abbe 30"x30". Also Jar Mills.
#1 Raymond Autom. Pulverizer, 20 HP.
1—#00 Raymond Mill, 30 HP complete.
2—#0000 Raymond Mills.
Sturtevant #0, 18" hinged Hammer Mill.
Schutz-O'Neill #1 & 20" Pulverizers.
Williams #3 & 2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll Crusher.
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S. & Premier 1½ H.P. Colloid Mills.

MIXERS, SIFTERS & SCREENS

Day Imperial 75 x 150 gal. Jack.
Lancaster 6' dia. Vert. Mixer 25 HP.
Kent 3 HP. continuous dry mixer.
Baker Perkins double arm Mixers, 100 & 50 gals. Also single arm Mixers.
Blystone 3000# horiz. spiral mixer.
Day Brighton 20 gal. Change Can Mixers.
Read 50 & 100 gal. double arm mixers.
Read 80 qt. vert. mixer, 3 speed.
Orv. Simpson 20"x48" Rotex Sifter
Tyler 3'x5' Vibratory 2 deck Screen.
10—Dry Powder Mixers, 50 to 3,000#.
3—Day 8, 15 & 40 gal. Pony Mixers.
15—Portable Elec. Mixers, ¼ to 3 HP.
6—Lead and Paste Mixers to 150 gals.

MISC. AND SPECIALS

Kux 2½" dia. Tablet Machine.
Tablet Machines, Single Punch & Rotary.
Anderson & French Oil Expellers.
Kane 2 H.P. Gas Boilers, 200# pressure.
3—Stokes and Day Powder Fillers.
Filling Machines & Labelers.
Pneumatic Scale Automatic Capper.
1—Howe Mogul barrel and bag packer.
2—Worth 12"x12"x12" Vac. Pumps.
8—Devine, Buffalo, Stokes Vac. Pumps.
Conveyors & Elevators.
Soap Machinery for Toilet, Laundry, etc.
Centrif., Rotary, Duplex & Triplex Pumps.

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TANKS

1—Pfaudler 5'x18' Horizontal glass lined, 2500 gal.
1—Pfaudler 78" x 96" Vert. Glass lined 2300 gal.
2—1500 gal. 316 S S 5' x 9' Vert. 20 PSI.
1—7500 gal. 316 S/S clad 12' x 6' x 5'6" cone.
1—750 gal. 316 S S 5' x 5' cone bottom.
3—4' diam. 316 S/S Conical Hoppers.
2—3' x 32" 316 S/S Conical Hopers.
1—2' x 3' Horizontal Closed 316 S/S.
1—2½' x 3½' Horizontal Closed 316 S/S.
2—3' x 3½' Horizontal Closed Nickel Clad
2—7' x 11' Vert. Steel Brick & Lead lined.
1—7' x 7'4" Vert. Steel Brick & Lead lined 50 psi.
1—6' x 6' Vert. Steel Brick & Lead Lined.
1—4' x 5'6" Vert. Steel Brick & Lead lined, 50 psi.
4—4' x 8' Hor. Steel ASME 25 psi.
1—4' x 5'6" Hor. Steel ASME 25 psi.
2—3' x 7' Vert. Steel ASME 25 psi.

PUMPS—CENTRIFUGAL

1—Lawrence Vert. 316 S S 70 gpm 157' hd 20 HP.
1—Lawrence Vert. 316 S/S 55 gpm 107' hd 7½ HP.
2—Lawrence Vert. 316 S S 50 gpm 107' hd 5 HP.
3—Karbate Series 5A 60 gpm 60' hd 5 HP.
9—Karbate New Impellers.
1—I.R. 1000 gpm Series 5CRVL 40 HP.
2—I.R. 1000 gpm Series 5CRVL 30 HP.
2—I.R. 650 gpm Series 5CRVL 30 HP.

CONVEYORS

3—Link Belt 316 S S 18" x 12', 18" x 10' 18" x 7' twin screw.
1—Link Belt Steel 10" x 16' twin screw.
9—Link Belt 12" Troughing Belt Conveyors 15', 20', 30', 35', 45', 50' open and closed with drives and motors.

REACTOR—CONDENSERS

3—4' x 13' closed 316 S S Reactors or Convertors with 109—3" x 6' 316 S S tubes 150 psi.
1—Pfaudler 250 gal. Hastelloy C Reactor.
2—Pfaudler Monel Heat Exchanger 62 sq. ft.
8—Karbate Heat Exchangers 188, 70, 16.4 sq. ft.

DRYERS

1—Buflovak 6'x5'6" Monel Drum Flakers NEW with drives and motors.
1—Rietz 30' "Thermoscrew" Conveyor Dryer 304 S/S NEW with drive & motor.

MISCELLANEOUS

1—I. R. Jet Refrigeration Unit, complete, 136 Tons 50° F. to 45° F.
1—Patterson 7'6" Conical Blender Rubber lined with drive & 15 HP motor.
2—Buffalo-Forge Fans 10,000 cfm at 7" S.P., 20 HP motor.
20—Link Belt Reducers and drives from ¾ HP to 15 HP.

* All motors are 3/60/440 V. explosion proof.

SPECIAL

400 S/S Valves ½" to 4" flanged and screwed. Large quantity of Tube Turns, Ells, Tees, Flanges, Bushings, 1" to 5". Porcelain Valves 1" to 4". Glass Lined Valves 2" to 3".

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DRYERS

3—Link Belt Roto-Louvre 7'5"x20', 5'2"x20', 3'10"x12'.
3—Hersey 4'x30', 3'x20', 18"x12' S/S Hot Air Rotary.
1—Struthers-Wells 5'x15' nickel Rotary Vacuum.
2—Buflovak 42"x120" Atmos. double drum.
1—Buflovak 2'x4' double drum vacuum.
1—Devine single door Vacuum Shelf with six 40"x43" shelves.
3—Devine double door Vacuum Shelf 17 and 20—59"x78" shelves.
3—Stokes Rotary Vac. 3'x15', 30"x8', 18"x42".
1—Devine Rotating Vacuum 5'x10'.
2—Louisville Rotary Steam Tube 38"x25', 6'x40'.
5—Rotary Dryers 5'x30', 5'x40', 4½'x50', 6'x40', 6'x74'.

MIXERS

1—Patterson-Kelly 75 cu. ft. S S Twin Shell 10 HP, XP motor.
8—Day "Cincinnatus" double arm 660, 250, 100 and 50 gals.
3—Abbe Aluminum Powder 12, 20 and 40 cu. ft.
9—Steel jacketed Powder 50, 225 and 350 cu. ft.
1—Struthers-Wells 6'x9' S S Rotating, jacketed.
2—Robinson S/S jacketed Powder 48"x7'6" long, 90 cu. ft.

MILLS

1—Patterson NEW 6'x8' Porcelain lined Mill 50 HP motor.
3—Abbe Paterson 6'x8' unlined Ball Mills.
3—Abbe 5'x6', 4'x5', 3'x3½' Silex lined Pebble Mills.
1—Mikro Fulverizer #4TH.
1—Fitzpatrick Model D Comminuter, 3 HP motor.
1—National 6"x12" Two-Roll Mill, motor driven.
1—Williams 12"x18" S/S Hammermill.

CENTRIFUGES

1—Sharples PN-14 Monel, Super-D-Canter, 10 HP, TEFC motor.
2—Sharples C-20, C-27, Super-D-Hydrators, 316 S/S.
2—Bird 18"x28", 36"x50", stainless and steel, Solid Bowl Continuous.
1—AT&M 40" Suspended rubber covered, perforated basket.
4—Tolhurst AT&M 40", 36", 32", Suspended steel, stainless.
1—Bird 40" Suspended, rubber covered, imperforate basket.
1—AT&M 36" center-slung, rubber covered, perforated basket.
1—Fletcher 30" center-slung, S S perforated basket.
1—Tolhurst 26" suspended, rubber covered, perforated basket.
1—Fletcher 20" suspended S/S perforated basket.

REACTORS, CONDENSERS, TOWERS, TANKS

1—2500 gal. 304 S/S jacketed Reactor.
8—4000 gal. 7'x14' Steel jacketed, agitated Kettles.
6—8000 gal. Steel Mixing Tanks with coils.
1—10'x16' Aluminum Tank, ½" shell, 10,000 gals.
2—5,000 gal. Vertical 347 S/S Tanks ½" shell.
2—Pfaudler 100 gal. glass lined, jacketed, agitated Reactors.
1—8500 gal. Horizontal Pressure Tank, 275# W.P.
2—10'x40', 10'x30' Horizontal Storage Tanks ½" shell.
5—S/S Towers 7'x25'6", 4'x30', 12"x14'.
25—Atmospheric S S Heat Exchangers 715 & 477 sq. ft.
1—Struthers-Wells 536 sq. ft. S/S Heat Exchanger.

FILTERS

1—Oliver 8'x10' Monel Rotary Vacuum.
3—Eimco 18"x24", 18"x12", 316 S/S Rotary Vacuum.
1—Feinc 3'x1' S/S Rotary Vacuum String with Pumps.
1—Feinc 5'x3' Monel Rotary Vacuum String.
2—#3 Sweetland S/S Filters, 12-25" dia. leaves 75 sq. ft.
4—#3, #5, #7, #12 Sweetland Filters.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing.

MISCELLANEOUS

1—Foster Wheeler Dowtherm Unit 4½ million BTU.
4—Orville Simpson Rotex Sifters 40"x120", 40"x84."
6—Robinson, Sprout Waldron S/S Sifters 40"x84", single deck.
11—Stokes DDS2, D4, "R", and "T" Tablet Presses.
2—Ball & Jewell #2, #1½ Rotary Cutters.
7—Nash Vacuum Pumps #H7, #H6, #L5, #4, #2.
2—Beach-Russ Model "D" Vacuum Pumps 50 cfm.
7—Durco S/S Centrifugal Pumps 1" to 3".

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Machinery and Equipment at the former U.S.I.C. alcohol mfg. plant, Baltimore, Md.

18—Copper Rectifying Columns, from 12" dia. to 8'6" dia.

3—Copper Beer Still Columns, 7' dia.

30—Copper Shell and Tube Heaters, Coolers, Condensers, Dephlegmators, etc. Sizes up to 3000 sq. ft.

6—Steam chests from evaporators—900 sq. ft. tube surface each with stainless steel tubes and tube sheets.

1—La Bour Stainless Steel Centrifugal Pump, 6" x 4" with 30 HP TEFC motor.

4—Bronze Centrifugal Pumps, 4" x 3", 20 HP TEFC motors.

1—Stokes #4-S Water Still, 60 GPH.

1—Stokes #3A Water Still, 25 GPH.

3—Tank Scales: 60T Fairbanks; 50T Howe, 45T Howe.

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1—Conkey Triple Effect Vertical Long Tube Evaporator, 1900 sq. ft. copper tubes, Herculey vapor bodies, complete with pumps and piping. Installed in Westminster, Md. — NEVER USED.

1—Goslin Birmingham Quadruple Effect Vertical Long Tube Evaporator, 6965 sq. ft. copper tubes, cast iron bodies. Installed in Baltimore, Md.—excellent condition.

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IN SOUTH JERSEY

1—Hardinge Conical Ball Mill, steel liner, 6' dia. x 22" long, with Feeder, Classifier and Dust Collector.

1—Hardinge XC-2 Ruggles Coles Rotary Steam Tube Dryer, 4' dia. x 30' long, with feeder, discharge screw and Dust Collector.

1—Sturtevant 8 x 10 Jaw Crusher. Bucket Elevators, Screw Conveyor, Feed Hoppers with scales, Dust Collectors, etc.

AT CAMDEN, N. J.

4—Devine Vacuum Shelf Dryers, size #27, 17 shelves 59" x 78", double door.

1—Devine Vacuum Shelf Dryer, size #23, 13 shelves 59" x 78", double door.

4—Pebble Mills, Porox lined: 37" x 42"; 37" x 48"; 46" x 42".

1—Jeffrey 36 x 42 Hammer Mill.

1—2100 gal. Stainless Steel Tank, T-316, 8' D x 67" H.

AT EASTON, PA.

2—14,000 gal. Horiz.—Welded Steel Tanks.

3—7900 gal. Horiz.—Welded Steel Tanks.

12—9000 gal. Vert.—Welded Steel Tanks.

1—York Ammonia Compressor, size 12½ x 14½; steam driven.

25—Wood Tanks—4500 to 5000 gal.

AT CARIBOU, ME.

1—5000 gal. Pressure or Vacuum Cooker with agitator, 6'6" D x 20' L.

3—Vertical Steel Pressure Cookers, 2500 gal.

1—Continuous Mash or Starch Cooker, 8" dia. pipe, 8 passes, 40' long.

1—All steel Heat Exchanger, 9 sections, total 3950 sq. ft., 2" tubes.

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1—Day #3 gearless Pony Mixer.

1—Tolhurst 40" rubber covered suspended Centrifugal.

1—Bonnot 50 x 22" Ball Mill.

1—Gruendler 10" x 16" Jaw Crusher.

1—Parsons #26 Oval Bag Dust Arrestor.

1—Parsons Material Conveying System.

1—Redler 3" x 21' Conveyor.

1—Northern Dust Collector, 2000 CFM.

1—Monarch #93 Simplex Furnace.

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310-12 L. B. Roto Louvre Dryer SS.
705-20 L. B. Roto Louvre Dryer SS.
C27 Sharples Super-D-Hydrator SS.
C20 Sharples Super-D-Hydrator SS.
100 sq. ft. 347 SS Heat Exchanger.
5'x15' Rotary Vacuum Dryer, nickel.
250 cu. ft. SS Blender.
28A Robinson Gyro Sifter SS.
24" Filter Press, aluminum P&F.
5'x22' Ball Mill, complete, NEW.
19 cu. ft. Patterson Blender.
200 gal. Baker Perkins Churn.
48" Bird SS Centrifuge, perf.
36"x50" Bird Cont. Centrifuge.
19"x12' Karbate Column, NEW.
2000 gal. Reactor, 200 PSI.
12,000 gal. 150 PSI Tanks ASME (3).
1300 gal. Glass-lined Tank.
8'x10' Oliver Rotary Filter.
5'x10 Hearth Herreshoff Furnace.
8'—5'—18" Gayco Separators.
8'x125'x⅜" Rotary Kiln.
5'x20'x¼" Rotary Cooler, welded.
4'x27' Rotary Dryer, oil fired.
310-12 L. B. Roto Louvre Dryer.
502-20 L. B. Roto Louvre Dryer.
57' Elevator 10"x6" buckets
2100 CFM Sullivan Compressor, 100#.
625 CFM Worth. Compressor 100 PSI.
30,000 Propane Tanks ASME (4 NEW).

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REACTOR—Blaw Knox Dowtherm Jacketed in Stainless; 2700 Gal.
REACTOR—Monel 5'x5'; Jacketed and Agitated; 785 gal. capacity
REACTORS—Pfaudler Glass Lined; Jacketed and Agitated; sizes up to 1000 gal.
VACUUM PAN—Mojonnier Stainless; 3'x10' with Stainless Calandria
AUTOCLAVE—Lancaster; type 347 Stainless; 300 PSI; 50"x17'4"
AUTOCLAVE—A. O. Smith; type 316 Stainless; 370 PSI; 5'x9'
NICKEL KETTLE—1250 Gal. Jacketed; Dbl. Mot. Agitator; 6'x5'
EVAPORATOR—Inconel, Double Effect; 850 sq. ft. and 430 sq. ft.
EVAPORATOR—By Swenson; five body; quadruple effect; accessories
STERILIZERS—By American; jacketed; several sizes up to 48"x42"x96"
DRYER—Hersey Rot. Gas Fired Counter Current with flights; 5'x26"
DRYING SYSTEM—"Combustion Eng." 2 Stage Flash Drying System; 1000 lbs. per hr.
DRYER—Twin Drum Dryer by Gen. Am. Trans. 42"x120"; stainless accessories
EXTRACTION SYSTEM—New Blaw Knox Solvent Extraction System
CENTRIFUGAL—Bird Continuous; 36"x50"; with 40 H.P. Motor
CENTRIFUGAL—Bird Continuous; 18"x28" with solid conical bowl
CENTRIFUGE—Baker Perkins Termeer Model S 15 in type 316 Stainless
CENTRIFUGAL—Suspended A.T.&M.; 40"x24"; solid discharge
CENTRIFUGAL—Suspended Bird 48" Solid Bowl; rubber covered contacts
DELAVAL CENTRIFUGAL—Separator type; Model AA-OO in type 316 Stainless
CENTRIFUGE—Sharples H2 Noxljector with 15 HP PL. motor
D-HYDRATOR—Sharples Super D-Hydrator Model C27; Type 316 S/S contacts; 30 HP
FILTER PRESSES—Shriver & Sperry Pl. & Frame Presses; sizes up to 42"
FILTERS—Enzinger New Pressure Leaf Filters; 360 sq. ft.; 4'x57" with cone
FILTERS—Sweetland Pressure Leaf Filters sizes from No. 2 to No. 12
FILTER—Niagara Vertical Model 510-28; Type 316 S.S.; 48" dia. Tank
FILTER—Horizontal Rotary Vacuum Filter; 7' dia. Stainless contacts
FILTER—Oliver Dorrco Rotary Vacuum; 6'x3' with Nickel contact parts
FILTER—Eimco Rotary Vacuum Filter; 8'x8'
MIXER—H. K. Porter Stainless Jacketed Ribbon Mixer; 4'x4'x7'6"
MIXER—Baker Perkins CASCADE Mixer; Jacketed; Type 316 Stainless
MIXERS—Baker-Perkins and W. & P. Jktd. Heavy Duty Mixers; 100 and 200 gal.
DUST COLLECTOR—Type 316 Stainless Steel; Cont. 12000 CFM; self cleaning
PEBBLE MILLS—Abbe, Patterson, International Mills up to 8'x8' with 50 HP
BALL MILL—Hardinge Conical Ball Mill; 10'x48"; Titanite Liners
IMP MILLS—By Raymond; Models No. 00, 0000, #32 and #47
HAMMER MILLS—Williams Model No. 4 and 6; will take motors up to 250 HP
TANKS—Stainless Lined Pressure Tanks by A. O. Smith; 10'x30"; 20,000 gal.

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1—Doyle & Roth Type 316 Stainless Steel Heat Exchanger, 168 sq. ft.
1—American Type 316 Stainless Steel Heat Exchanger, 130 sq. ft.
2—Badger Aluminum Heat Exchangers, 106 sq. ft. each.
1—Badger Stainless Steel Double Pipe Cooler, 79 sq. ft.
2—Badger Aluminum 14" x 12'—12 plate Stripping Columns.
1—Milton Roy Type 316 Stainless Steel Simplex Pump, Model MD1-67-56 SML with 1 HP motor.
2—Worthite Centrifugal Pumps, Model ICG1, with 1 HP Reeves Variable Speed Drives.
5—Worthite Centrifugal Pumps, Model 1CG1, with 1 HP motor.
1—Mikro #2 Pulverizer with 15 HP motor.

Chicago, Ill.

2—Stainless Steel 8000 gal. Vertical Mixing Tanks with stainless steel turbine and motor drive.
1—Stainless Steel 3000 gal. Jacketed Reactor with stainless Steel agitator and motor drive.
1—Stainless Steel 4500 gal. Vertical Storage Tank complete with stainless steel coil.
1—New Stainless Steel 1200 gal. Jacketed Kettle.
1—Stainless Steel 3500 lb. Capacity Double Ribbon Powder Mixer. Unit complete with 20 HP motor drive.
1—Groen 100 gal. Stainless Steel Jacketed Kettle W.P. 100 PSI.
1—Fitzpatrick Stainless Steel Model D Comminuting Machine with 5 HP motor.
1—Mikro #2TH Pulverizer with 15 HP motor.
1—Mikro #1SI Pulverizer with 5 HP motor.
1—Orville Simpson 40" x 10' 3" Rotex Sifter with motor.

Baltimore, Md.

1—Hardinge Rotary Dryer, 10' dia. x 100' long, Type XF-24 with motor and reducer.
1—Hardinge Rotary Cooler 104" dia. x 70' long with drive.
1—Hardinge Rotary Cooler 104" dia. x 30' long with drive.
1—Bird Classifier 36" x 50" Basket Speed 1200 RPM.
1—Bird Centrifugal Filter 40" x 60" speed 1200 RPM.
1—Hardinge Ball Mill 7' x 9' with reducer.
1—Hardinge Ball Mill 6' x 12' with reducer.
2—Eimco 10' x 12' Rubber Covered Filters.
1—Oliver Pressure Filter, rubber covered, size 3' x 6' complete.
2—5'6" x 42' long Rotary Dryers, 3/8" shell.
1—Hersey Rotary Dryer, 5' dia. x 23' long.

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3—Shriver 42"x42' cast iron, plate & frame closed del. Filter Presses, 27-1" chambers.
3—Day 15 gal. Pony Mixers, m.d. S.S. cans.
2—Haskins Cap Tighteners, m.d.
1—4TH Mikro Pulverizer 60 HP, tefc.
2—Stainless Steel Hersey Rotary Dryers, 5'x26' and 6'x23'.
2—8'x125' Rotary Kilns.
3—Buflovac 42x120, 32x120 Atmos dbl. Drum Dryers, complete; 1—American 24x36.
2—54"x70" and 1—40"x60" Bird Continuous Centrifugals, S.S Solid bowls.
2—Unused ±12 Sweetland FILTERS, 48 bronze monel covered bottom drainage leaves 3" c.c. Latest type; 1—±2, 23 copper leaves 1½" cc.
1—Day ±30 Imperial jack. Mixer, 75 gal.
1—Buflovac 48"x40" Drum Flaker, chrome plated, s s ends.
9—Sperry 18"x18" Filter Presses, 11 ch.
1—Link-Belt Co. ROTARY DRYER, Roto-Louvre, ±502-16 Type C, 5'2" dia. 16' long with ±304 S.S contact parts.
5—Horiz. Dry Powder Ribbon Mixers, 4000#, 1500#, 500#.

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1—New Nash Vacuum Pump Type AL-572.
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FDA Gets

—Continued from page 4

but thirty-three of whom will be technicians. The field staff will be increased by ninety-six persons, including fifty inspectors, and the Washington office will be increased by thirty-eight persons.

It is also planned to expand the medical division and raise its prestige by presenting its work more frequently to scientific meetings. Mr. Larrick hopes over the next few years to build up the medical division to a point where it can service the new drug applications very quickly and not use the full 180 days now allowed to judge an application.

Last year more than 1,200 tons of potentially dangerous foods were seized because they contained deleterious ingredients, according to the Commissioner. Eighty percent of the seizures were based on filth and decomposition, and 7 percent on contamination with deleterious substances or failure to meet the special dietary composition claimed.

Illegal sales of dangerous prescription drugs were charged in 141 drug prosecutions instituted last year. Penalties assessed for illegal sales or refills, he added, have included seven jail sentences of from three months to one year required to be served, twenty suspended jail sentences, and fines ranging from $1 to $7,000.

Perry Bros. Establishes Flavor Base Laboratory

A subsidiary to handle its flavor business has been established by Perry Bros., Inc., Woodside, N. Y. The new division, Perbro Laboratories, will manufacture a line of essential oils and flavor bases for the pharmaceutical, beverage and food fields.

Herbert J. Bass will be in charge of the technical service program, and Allen J. Baron will be in charge of quality control and production.

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Advertisers Index

Aaron Equipment Company 66
American Agricultural Chemical Co., The .. 1
American Zinc Sales Co. 59
Anderson-Prichard Oil Corp. 39
Archer-Daniels-Midland Company 62
Ashcraft-Wilkinson Co. 33

Baker, J. T., Chemical Co. 8
Barclay Chemical Company, Inc. 66
Bareco Wax Co. Division Petrolite Corporation 29
Barrett Division, Allied Chemical & Dye Corporation 44
Benzol Products Company 51
Berkshire Chemicals, Inc. 53
Better Finishes & Coatings, Inc. 36
Bios Laboratories, Inc. 51
Bower, Henry, Chemical Mfg. Co. 35
Bowman, Charles, & Co. 50
Buhl Equipment Company 63
Brode Corporation, The 62
Browning Chemical Corporation 34

Carbide & Carbon Chemicals Company, Division Union Carbide & Carbon Corporation 42
Cary Chemicals, Inc. 56
Celanese Corporation of America, Chemical Division 68
Chemical & Process Machinery Corp. 65
Chemical Service Corp. 66
Chemical Solvents, C. P., Incorporated 68
Chemirad Corporation 41
Chemsol, Inc. 66
Church & Dwight Co., Inc. 33
Coal Chemical Sales Div., United States Steel Corp. Subsidiaries 45
Columbia Southern Chemical Corporation .. 32
Commercial Solvents Corporation 17
Connelly, Inc. 45
Consolidated Chemical Industries, Inc. 36
Consolidated Products Company, Inc. 65
Consulting Chemists and Engineers 47
Corn Products Refining Company 58
Coupe, Robert A. 32

Darling & Co. 62
Diamond Alkali Company 1
Distillation Products Industries, Div. of Eastman Kodak Company 42
Dow Chemical Company, The 14, 15
Duff Chemical Company, Inc. 37
Dunkel, Paul A., & Company, Inc. 50
Du Pont de Nemours, E. I., & Co., (Inc.) 16
Duval Sulphur & Potash Co. 33

Eastman Chemical Products, Inc. 41, 59
Emery Industries, Inc. 61
Enjay Company, Inc. 23
Equipment Clearing House, Inc. 63
Erie Casein Dryers 57

Fairmount Chemical Co., Inc. 50
Feinchemie Berlin 53
Felton Chemical Company, Inc. 55
Fezandie & Sperrle 43
Fine Organics, Inc. 68
First Machinery Corp. 64
Florasynth Laboratories, Inc. 54
Fritzsche Brothers, Inc. 54

Gane & Ingram, Inc. 49
Gas Purifying Materials Co., Inc. 33
Gelb, R., & Sons, Inc. 65
Grace Chemical Company 38
Greeff, R. W., & Co. 40
Gross, A., & Company 60

Hall, C. P., Co. 53
Harchem Division, Wallace & Tiernan, Inc. .. 42
Harshaw Chemical Co., The 41
Heat & Power Co., Inc. 64
Hercules Powder Company, Incorporated .. 42
Heyden Chemical Corporation 51
Hoffmann-La Roche, Inc. 2
Hooker Electrochemical Company 34
Hutchinson, D. W., & Co., Inc. 54

International Minerals & Chemical Corporation 20

Kolon Trading Co., Inc. 45
Kramer, P. S. 45

Lawler Company 63
Lemke, B. L., Co., Inc. 53
Leonard, Theodor, Wax Co., Inc. 62
Lever Brothers Company 40
Lindsay Chemical Company 50
Loeb, H., & Son 65
Loeb Equipment Supply Co. 64
Lucidol Division, Wallace & Tiernan, Incorporated 41
Lueders, George, & Co., Incorporated 54

Machinery & Equipment Corp. 64
Magnus, Mabee & Reynard, Inc. 54
Mallinckrodt Chemical Works 31
Mantrose Corporation, The 56
Marshall Railway Equipment Corporation ... 66
Mathieson Chemicals, Clin Mathieson Chemical Corporation 10, 34
McKesson & Robbins, Incorporated 49
Merck & Co., Inc. 37
Metalsalts Corporation 51
Michigan Chemical Corporation 13
Midland Tar Distillers, Inc., The 46
Mutual Chemical Division, Allied Chemical & Dye Corporation 43

National Commercial Whsg. Co. 66
Neville Chemical Co. 57
Newman Tallow & Soap Machinery Co., Inc. .. 64
Niagara Alkali Company 26
Nitrogen Division, Allied Chemical & Dye Corporation 36, 41

Olin Mathieson Chemical Corporation Industrial Chemicals Division 10, 34
Orbis Products Corporation 54
Oronite Chemical Company 11

Pacific Coast Borax Co. 1, 28
Parsons-Plymouth, Inc., M. W. 59
Penick, S. B., & Company 48
Perry Equipment Corp. 64
Pfaltz & Bauer, Inc. 50
Philadelphia Quartz Company 34
Philipp Brothers Chemicals, Inc. 68
Potash Company of America 38
Prior Chemical Corporation 1
Procter & Gamble Co. 40
Publicker Industries, Inc. 1
Purocaine, Inc. 53

Quaker State Oil Refining Corp. 53

Raney Catalyst Co. 40
Read, Chas. L., & Co., Inc. 32
Reichhold Chemicals, Inc. 25
Republic Steel Corporation 46
Richmond Mica Corp. 59
Richter, Gedeon Pharmaceutical Products, Inc. 51
River Plate Corporation, The 61
Robeco Chemicals, Inc. 68
Robertet, P., Inc. 55

Sergeant, E. M., Pulp & Chemical Co., Inc. .. 35
Sharples Chemicals, Inc. 1
Shea Chemical Corporation 35
Sheffield Chemical Company, Inc. 57
Shell Chemical Corporation 19
Foster D. Snell, Inc. 67
Spencer Chemical Company 32
Stein Equipment Co. 63
Sterwin Chemicals, Inc. 55
Strohmeyer & Arpe Co. 60
Sumner Chemical Company, Inc. 53
Sunkist Growers, Inc. 22
Synthetic Products Company 59

Tamms Industries, Inc. 58
Tennessee Corporation 36
Texas Gulf Sulphur Co., Inc. 36
Thurston & Braidich 50
Titanium Pigment Corporation 27
Tragacanth Importing Corp. 50
Trask, Arthur C., Company 61
Truland Chemical & Engineering Co., Inc. .. 66

Ungerer & Co. 55
Union Carbide & Carbon Corporation, Carbide & Carbon Chemicals Company Division 42
Union Standard Equipment Co. 65, 66
U. S. Industrial Chemicals Co., Division of National Distillers Products Corporation .. 60
United States Potash Company, Incorporated 38
U. S. Steel Corporation Subsidiaries, Coal Chemical Sales Div. 45
U. S. Steel Products Division, U. S. Steel Corporation 21
U. S. Testing Company, Inc. 68

van Ameringen-Haebler, Inc. 55
Velsicol Chemical Corporation 59
Vitamerican Oil Corporation 53

Westvaco Mineral Products Division, Food Machinery & Chemical Corporation 6
Will & Baumer Candle Co., Inc. 62
Wood, Alan, Steel Company 46
Wyandotte Chemicals Corporation 35

Zink & Triest Co. 55
Zinsser & Company, Inc. 43

Automobile Output

—Continued from page 3

mercaptobenzothiazole and benzothiazyl disulfide—are moving at a slower pace. However, many chemical suppliers see things looking up by summer for two reasons:

- Introduction of the 1957 car models in August.
- Adoption of the new fourteen-inch tire as standard equipment in Chevrolet, Fords and Plymouths.

Caustic Soda, Sulfuric Acid

Demand for caustic soda and sulfuric acid, which go into rayon tire cord, continues excellent, with no sign of a letup because of the automobile situation.

Similarly, call for hydrochloric and nitric acids, which move into cars via stainless steel, is at near-record levels, with no signs of slackening.

Consumption of chromic acid, normally the first to feel the effects of a cutback in auto production, is steady and active.

A footnote to the entire situation is provided by the saltcake industry, which points out that a cutback in automobile production can mean a tightening of saltcake supplies because:—

- Neoprene goes into automobiles and when there is less neoprene, there is less saltcake.
- Hydrochloric acid is one-quarter of the pickling acid for steel. Thus, less saltcake will come from Mannheim furnaces if there is a decline in steel output.
- Production of rayon tire cord and chromic acid is related directly to that of saltcake and, here again, less of these materials means less saltcake.

Foote Will Absorb

—Continued from page 3

metallurgical, ceramic and other industries. It mines, processes and sells many types of lithium products. Its lithium mines are in Kings Mountain, N. C., and its chemical plants are at Sunbright, Va., and Exon, Pa. It maintains a research department at Berwyn, Pa.

Electro Manganese, the majority of whose shares are held by residents of Minneapolis, Min., claims to be the world's largest producer of pure manganese by an electrolytic process which it developed. Commercial production was achieved in 1941, and successive expansions have brought output to twelve times the original volume. Its two plants are located in Knoxville.

Russell H. Bennett, chairman of the board of Electro, is expected to be elected to the Foote board of directors if the consolidation plan goes through.

Successful Coating Materials for Packaged Products

The development of a successful coating material requires careful consideration to the individual requirements. Factors include strength, absence of toxic principles, ease of application and removal, elasticity, gas and vapor permeability.

A coating formulation may also require a great deal of insight, research and development. A great range of possible ingredients is available for such a formulation, and experimental trials must be planned very carefully.

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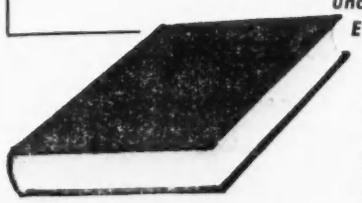

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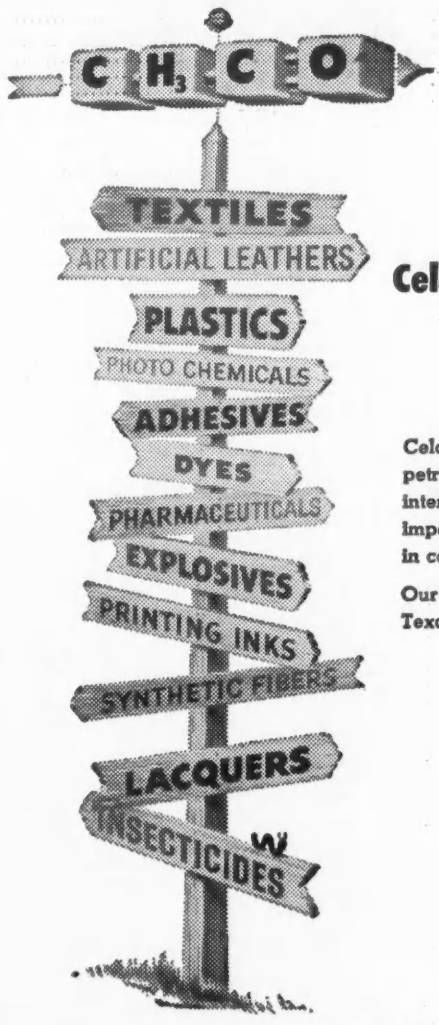

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